

Psychological Abstracts

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EXECUTIVE EDITOR
ALLEN J. SPROW

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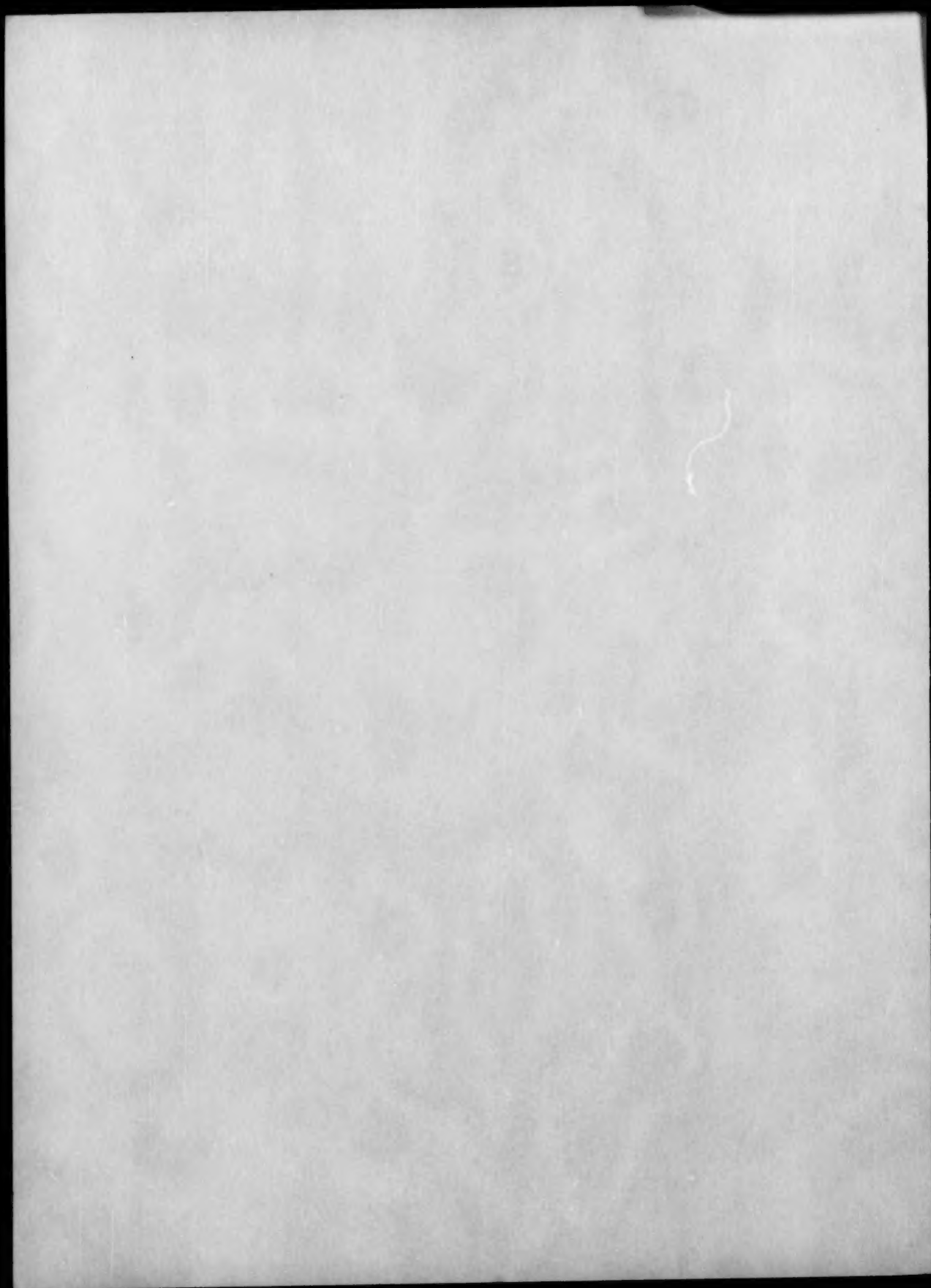
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GENERAL

3454. **Apostel, L., Mandelbrot, B., & Piaget, J.** *Études d'épistémologie génétique: II. Logique et équilibre.* (Studies of genetic epistemology: II. Logic and equilibrium.) Paris, France: Presses Universitaires de France, 1957. 173 p. 700 Fr.—Mandelbrot provides preliminary notes on the abstract definition of degrees of equilibrium and of concepts of "stability," "reversibility," etc. Piaget then discusses logic and equilibrium in relation to the behavior of the subject. Apostel further develops the theme by introducing and elaborating a comprehensive theory of graphs with particular reference to Gestalt and the theory of games.—*G. T. Lodge.*

3455. **Beth, W. E., Mays, W., & Piaget, J.** *Études d'épistémologie génétique: I. Épistémologie génétique et recherche psychologique.* (Studies of genetic epistemology: I. Genetic epistemology and psychological research.) Paris: Presses Universitaires de France, 1957. 134 p. 500 Fr.—This is the first volume of a series published under the direction of Piaget: "In résumé, the 3 studies contained in this first collection share a preoccupation with rapprochement, from diverse directions, of epistemological and psycho-genetic researches." Piaget's 2 introductory chapters set forth a program and method of genetic epistemology in relation to logic, mathematics, physics, biology and psychology. May's chapter critically explores Carnap's conceptions of logic and language, as well as the possibility of applying experimental methods to epistemological problems. In a compact final chapter, Beth discusses certain relationships between formal logic and natural thought.—*G. T. Lodge.*

3456. **Bruehl, Charles P., & Campbell, William E.** *Psychology, the study of man's normal mental life.* Philadelphia, Pa.: Villanova Press, 1957. vii, 387 p. \$5.50.—After 7 chapters of definition and discussion of the scope of psychology, the materials of the beginning course are organized under sense cognition, rational cognition, and sense appetite. There is a final definitive chapter of the nature of the self. "Without wishing to belittle the value of psychological experiment, we are inclined to think that human nature and human conduct are more profitably observed and studied in a department store, at a ball game, at the bridge table. . . ." The chief empirical method of psychology is introspection.—*W. L. Wilkins.*

3457. **David, T.** *Mikhtavin al hapsikhologia beyamenu.* (Letters on psychology today.) *Ofakim*, 1957, 11, 2-6; 24.—In the "1st letter" hints are given about psychology in the last decade, first of all in the States. The differentiation of psychology in U.S.A. is stressed: 17 branches and some sub-branches as well as various approaches and methods, and striving to integration. The "2nd" letter deals with Weber

and Helmholtz, experimentalism and Thorndike as preparatory steps towards psychoanalysis.—*H. Ormian.*

3458. **Grace, Harry A.** *When is science?* *Educ. Theory*, 1957, 7, 93-101.—"An investigation is scientific when the method it employs is appropriate to the problem it seeks to solve." The investigator may choose either his problem or his method, not both. Having chosen a problem, it is his responsibility to select the method most appropriate to the problem. Or, choosing a method, he must employ that method toward the solution of appropriate problems. "Both the freedom of selection and the responsibility of appropriate coordination of problem and method are conditions for membership in the community of science." Techniques of investigation used in psychological science are classified into three categories: (1) "discovery," e.g., laboratory experimentation; (2) "uncovery," e.g., testing or interviewing; (3) "recovery," e.g., symbol analysis.—*A. E. Kuenzli.*

3459. **Mahler, Vera.** *Psikhologia.* (Psychology.) Tel Aviv, Israel: Urim, General Federation of Labor, 1957. 354 p.—The 1st part of a "Textbook for studying general and developmental psychology." "This book is intended rather for educators. It is indeed not a book about 'educational psychology,' i.e. I didn't stress the educational aspect, but the psychological one." In any case it is adjusted to the examination requirements in teacher training colleges in Israel. This 1st part contains: (1) Introduction (26 p.): subject-matter, purposes, between sciences and humanities, branches, value for educators, methods; (2) Basic concepts (165 p.): Man in his environment (natural, acquired, creative), ways of behavior; (3) Developmental psychology (160 p.): Methods, development, its stages and factors, language, play, imagination, learning, intellectual development, interest, emotion, social development, development of behavior.—*H. Ormian.*

3460. **Meng, Heinrich.** *Psychoanalysis, ethics and worldly care of the soul.* *Amer. Imago*, 1956, 13, 335-346.—From the very beginning of his studies, Freud as a psychotherapist was interested in the problem of ethics. Beginning with the investigation of the instincts and going on to a consideration of the ego and of conscience, he proved that ethical conflict underlies every neurosis. Both Freud and Nietzsche insisted in their ethics on a postulate which the love of truth demands of man.—*W. A. Varvel.*

3461. **Menitskii, D. N.** *Kibernetika v biologii.* (Cybernetics in biology.) *Biofizika*, 1957, 2, 129-141.—The chief possibilities of applying cybernetics in biology are presented and linked to Pavlovian conceptions.—*I. D. London.*

3462. **Minkowski, E.** *Psikhopatologia ufilosofia.* (Psychopathology and philosophy.) *Iynn*, 1956, 7, 193-209.—The aim is to understand the mind's phe-

nomena and to show the fertility of formal analysis in psychopathology and general psychology. The phenomenological approach is demonstrated by the example of madness. This approach enables to differentiate between affective and structural elements in psychopathological and spiritual phenomena, to criticize mechanical conceptions (e.g., from the later stage of Freud's psychopathology), and to limit affective psychopathology to its right dimensions. Phenomenological analysis shows that the aspect of evaluation is not less important than the aspect of reasoned connection in the dynamics of the mind's life. And so psychopathology and philosophy meet. English summary.—H. Ormian.

3463. Mintz, Alexander. Recent developments in psychology in the U.S.S.R. *Annu. Rev. Psychol.*, 1958, 9, 453-504.—A review with 220-item bibliography.—A. J. Sprow.

3464. Palau Marti, Montserrat. *Métaphysique noire et psychologie*. (Psychology and Negro metaphysics.) *Rev. Psychol. Peuples*, 1956, 11, 174-180.—The Bantu concept of the universe is marked by the importance of force and power. These forces are ordered in the universe, with the power of God at the top. The Dogon concept of the world has its counterpart, not only of God but of the Devil, each with special areas of jurisdiction. Brief summaries of the metaphysics of these two African societies, to which the cultures of Negroes all over the world are related, are summarized and compared to some of the psychological concepts of the occidental. It is concluded that our contemporary psychology is leading us to some of the same conclusions embodied in the metaphysical intuitions of the Negroes.—R. O. Peterson.

3465. Pavlov, I. P. *Sämtliche Werke*. (Collected works.) Berlin: Akademie Verlag, 1953 & 1954. 6 vol. bound in 8. 456, 696, 670, 395, 452, 383 p. 149 DM.—German translation of the second Russian edition of I. P. Pavlov's "Polnoe sobranie sochinenii."

3466. Quine, W. V. The scope and language of science. *Brit. J. Phil. Sci.*, 1957, 8, 1-17.—The author considers the question of the basis for the strength of our conviction that there really is an external world. A related question concerns the insistence upon a world of reference as against the world of language. It is argued that the stress on externality, derived from our earliest impressions, is carried into science as a matter of course. While one can go far with a physical ontology, even to the point of making the addition of mental objects unnecessary, this approach will not suffice. Abstract objects are also needed "if we are to accommodate science as currently constituted."—P. E. Lichtenstein.

3467. Sartain, Aaron Quinn; North, Alvin John; Strange, Jack Roy, & Chapman, Harold Martin. *Psychology: Understanding human behavior*. New York: McGraw-Hill, 1958. x, 444 p. \$6.00.—The authors "believe psychology can be effectively presented to the beginning student as a science and still be meaningfully related to his own experience." Briefly, the book may be characterized as a scientific introduction to the psychology of adjustment. 9 of the 19 chapters are devoted to classical psychology—perception, learning, thinking, motivation, physi-

ology, heredity—while the remaining chapters are devoted to the self—its relation to behavior, personality, culture, defense mechanisms, attitudes, social relations, measurement. Each chapter has discussion questions and suggestions for further reading.—R. S. Harper.

3468. Sergievskii, M. V., & Kadochkin, L. N. *Kratkie zamechaniia o zhurnale "Voprosy psikhologii"*. (Brief remarks on the journal "Problems of psychology.") *Zh. vyssh. nervn. Deiatel.*, 1956, 6, 634-644.—The newly founded journal "Problems of Psychology" is fulfilling its promise as a first rate publication. Various articles published since its founding are discussed.—I. D. London.

3469. Uco, Sinai. *Al yehasim ben psikhologia ufilosofia beyamenu*. (Relations between psychology and philosophy today.) *Iyun*, 1956, 7, 210-223.—The very subject-matter of modern psychology leads necessarily to the posing of philosophical questions. E.g., behaviorism, W. Stern's personalism as well as clinical psychology lead to problems of personality, and each explanation of personality needs concepts such as integration, adjustment, etc., which become relevant only in terms of a philosophical theory of values. The subject-matter of psychology (the meaning of man's life) is also the main subject-matter of philosophy. English summary.—H. Ormian.

3470. Van Schilfgaarde, P. *Mens en dier*. (Man and animal.) *Tijdschr. Phil.*, 1957, 19, 3-20.—The important difference between men and animals is that in the awareness of animals there exists neither the principle of identity nor the fear of solitude. Man is the being who makes judgments, and that means he is the being who is free. This freedom finds its realization in language, science, and culture. French summary.—R. Piret.

THEORY & SYSTEMS

3471. Albert, Ethel M. Value sentences and empirical research. *Phil. phenomenol. Res.*, 1957, 17, 331-338.—Any analysis of actual ethical discourse requires recourse to empirical methods since the meaning of ethical judgments is dependent upon "their relation to appropriate contexts." Logico-linguistic methods have utility, however, "for the criticism and correction of the scientific language employed in the study of actual ethical discourse."—P. E. Lichtenstein.

3472. Bêlênesku, I. N. *Kibernetika i nekotorye voprosy fiziologii i psikhologii*. (Cybernetics and some problems of physiology and psychology.) *Vop. Filos.*, 1957, 11, 153-166.—Wiener, Ashby, and Couffignal are criticized for bypassing the data of physiology and psychology in their intemperate indulgence in "unrestrained analogizing" and "fantastic interpretation and generalization" in cybernetic applications to man. Kossa is criticized for his "idealistic refutation" of cybernetics, since "indeterminism in understanding behavior" is intolerable. Frolov is criticized for playing down the positive side of cybernetics. A Marxian and Pavlovian analysis of the similarities and differences between the brain and the calculating machine follows. Among the differences noted are the presence in the former of equipotentiality, the ability to "convert external factors into internal factors which may produce structural

changes, transmittable by heredity," and creativity. The laws of brain activity are in principle not reducible to those of physics.—*I. D. London.*

3473. Bolles, R. C. Occam's razor and the science of behavior. *Psychol. Rep.*, 1957, 3, 321-324.—A radically parsimonious position is discussed, which not only eschews central determiners of behavior but also stimulus determiners. Thus, only behavior itself remains to be accounted for. Some implications of this position are indicated, and some applications to empirical situations are suggested.—*C. H. Ammons.*

3474. Boring, Edwin G. Where is human behavior predetermined? *Sci. Mon.*, N. Y., 1957, 84, 189-196.—"When is human behavior predetermined? Is man free to choose? sometimes? always? in respect to everything? May he thus by choice control his own individual destiny? This is surely what most men believe most of the time. The scientist, on the other hand—because of the business of science is the study of causes and their effects—keeps insisting that any action of man, if we but knew enough, could be referred to its causes; that the explanation of all human behavior lies in the ancestral genes of the behaving person, in his past experience, and in the various accidents that have happened to him since he was conceived. On which side does truth lie?" Major topics are Freedom and Determinism; the Dilemma; Truth versus Policy in Scientific Theory; Great Men: Freedom as a Negative Concept; Causes of Belief; Causality as a Model; Should Behavior be Controlled?; and Use of Incompatibles. "Do we have to accept incompatibles simultaneously? Perhaps not simultaneously, but certainly alternatively—or so it seems to me." 26 references.—*S. J. Lachman.*

3475. Candland, D. K. Plato and behaviorism: A reply. *Psychol. Rep.*, 1957, 3, 300.—The author points out that Plato was not concerned with methodology but with immortality in the passage from Phaedo quoted by Swartz (see 32: 3491). The criticisms of both Plato and Swartz are incomplete.—*C. H. Ammons.*

3476. Dewan, Edmond M. "Other minds": An application of recent epistemological ideas to the definition of consciousness. *Phil. Sci.*, 1957, 24, 70-76.—The epistemological methods of Henry Margenau are applied to the problem of defining consciousness. A distinction is made between "epistemic" (operational) and "constitutive" (structural) definitions. A constitutive definition would relate awareness and "consciousness in others" to the physical observables in the cortex. Through the "inductive extension" of the constitutive definition, it would be possible to propose meaningful answers to questions concerning "other minds," and even to the question: "Will it ever be possible to build a machine which can think?" The answers rest in determining the structural isomorphism between things to which the constructs, thinking and consciousness, are applied.—*M. B. Turner.*

3477. Duijker, H. C. J. Een sophist in de academie. (A sophist at the academy.) *Ned. Tijdschr. Psychol.*, 1957, 12, 172-204.—A critical analysis, in dialogue form, of Van den Berg's *Metablectica* (see 32: 1066) showing the essential shortcomings of Van den Berg's psychology.—*R. H. Houwink.*

3478. Hofstätter, P. R. Behaviorismus als Anthropologie. (Behaviorism as "anthropology.") *Jb. Psychol. Psychother.*, 1956, 4, 357-370.—The image of man in behaviorism stems from the Calvinistic and Puritan world view, through the immediate lineage of James, Dewey, and Watson. James's Pragmatism is in accord with the Calvinistic belief that a man's predestined salvation can be conjectured from his present success. The contrasting (to Behaviorism) emphasis in psychology on understanding and insight derives from the Lutheran conception of existence.—*E. W. Eng.*

3479. Kaminsky, Jack. Dewey's concept of an experience. *Phil. phenomenol. Res.*, 1957, 17, 316-330.—Dewey's concept of an experience is clarified in order to show how Dewey reached the conclusion that ethical, political, and esthetic sentences are the most meaningful to men. Art is an outcome of the highest actualization of experiencing and, unlike science, provides experiences "whose attainment makes man a better adapted and more satisfied human being."—*P. E. Lichtenstein.*

3480. Kraemer, William S. Reason and/or emotion? *Educ. Theory*, 1957, 7, 59-62.—The epistemological phase of the problem is stated in these questions: "At what stage in the knowing process does reason appear?" "Do experiences which involve little reflection require reason?" "Does ordinary perception necessitate reason?" The indirect perceptionist, or epistemological dualist, has difficulty accounting for "truth" while the direct perceptionist, or epistemological monist, cannot account for "falsity" (illusions, dreams). An illuminating point is that, since Plato and Aristotle, exponents of all types of views (rationalists, intuitivists, hedonists, dictators) have all sought justification at the bar of reason. It can be argued, therefore, that emotion should rightly be subservient to reason.—*A. E. Kuenzli.*

3481. Lynn, D. B. The organism as a manufacturer of theories. *Psychol. Rep.*, 1957, 3, 353-359.—All men, scientists and non-scientists, learn by developing theories about the world, testing the hypotheses, discarding those that fail, and discarding or modifying those which fall short of certain criteria. Implications for psychotherapy are discussed.—*C. H. Ammons.*

3482. Myrick, R. A reply to Pierce-Jones. *Percept. Mot. Skills*, 1957, 7, 61.—The author agrees that inability to distinguish between antecedent and consequent variable, where different dimensions are involved, precludes statement of scientific laws. (See 32: 3486.)—*C. H. Ammons.*

3483. Nowogrodzki, Tadeusz. Nauka Pawłowa a psychologia. (Pavlov's teaching and psychology.) Warszawa, Poland: Państwowe Zakłady Wydawnictw Szkolnych, 1956. 122 p.—Elementary exposition of the Pavlovian theory of higher nervous activity as the basis for psychology. 52-item bibliography.—*M. Chojnowski.*

3484. Pepper, Stephen C. The sources of value. Berkeley: Univ. California Press, 1958. xiv, 732 p. \$8.50.—The author presents a general philosophical theory of how man's values arise and operate in his life's circumstances. The theory is claimed to be founded upon definite empirical materials. Values Pepper bases on purposive behavior rather than on the usual hedonic foundations. An advantage of the

purposive behavior basis of value is that the structure of purpose has been objectively studied while pleasure requires introspective observation (33). Still, because purposive drives include pleasure and pain feelings (34), he does not spurn introspection (37). To show how values, though instinctive in origin and thus mainly biological, can as desires extend into complex individual psychological and social levels, Pepper has constructed what he calls "selective systems." These are "dynamic structures" or integrating processes which operate upon "natural norms." For those situations which simultaneously include a number of purposes, the author makes use of Lewin's concept of life spaces.—J. R. Kantor.

3485. Peters, R. S., & Tajfel, H. **Hobbes and Hull: Metaphysicians of behaviour.** *Brit. J. Phil. Sci.*, 1957, 8, 30-44.—Hobbes and Hull have given us their versions of a Grand Plan for the explanation of human behavior. Both present mechanistic accounts which show striking similarities, but Hull's version is given a "more ambitious and detailed expression." "Misled by the obvious fact that physiological theories are extremely relevant to explanations of human actions, Hull, like Hobbes, thought that descriptions of human actions could be deduced from a physiological theory alone. This, in our view, is the basic logical mistake in mechanistic theories which both Hobbes and Hull commit in a surprisingly similar manner."—P. E. Lichtenstein.

3486. Pierce-Jones, J. **An analysis of Myrick's theory of unidimensional subject-stimulus relationships.** *Percept. Mot. Skills*, 1957, 7, 37-40.—This paper presents an analysis and critique of Myrick's unidimensional approach to characterizing and measuring subject-stimulus relationships. Its most important weakness is said to be that, in experimental application, it would lead to failure to study the effects of varying stimulus conditions on response, since the single dimension upon which both stimuli and associated behavior are scaled is a behavioral (response) dimension albeit one selected by E.—C. H. Ammons.

3487. Raju, P. T. **Being, existence, reality, and truth.** *Phil. phenomenol. Res.*, 1957, 17, 291-315.—The concepts of being, existence, reality, and truth are held by the author to be central in philosophy yet vague and subject to loose usage. The author contends that these concepts "belong to distinct universes of discourse and standpoints which partly overlap and partly extend beyond each other." These universes of discourse have a common point of reference which is the experience of the human individual.—P. E. Lichtenstein.

3488. Royce, J. R. **Toward the advancement of theoretical psychology.** *Psychol. Rep.*, 1957, 3, 401-410.—It was suggested that, while eventually it would be desirable to have mature theory in the form of rigorously deduced experimentally verifiable mathematical equations, the status of our knowledge of behavior in mid-twentieth century is such that theoretical psychology will be most fruitful at this time if it is inductive rather than deductive, qualitative rather than quantitative, relatively loose rather than rigorous, closely anchored to empiricism rather than highly abstract and removed from observations, relatively naive rather than sophisticated from the point of view of philosophy of science, and both circum-

scribed and all-inclusive in the direction of its efforts. Four broadly unifying postulates and three corollaries were specified as samples of this low-level, "elementary" type of theorizing.—C. H. Ammons.

3489. Salzman, Leon. **Observations on Dr. Tillich's views on guilt, sin, and reconciliation.** *J. Pastoral Care*, 1957, 11, 14-19.—A re-examination of the similarities and differences in the theological and psychological view of guilt and sin is offered in light of Dr. Tillich's writings. "Dr. Tillich has made a lasting contribution to psychoanalysis by emphasizing the participation element in the healing process, and the necessity of accepting one's self in spite of being unacceptable."—O. Strunk, Jr.

3490. Steer, H. O. **Allport's concept of structure.** *Canad. J. Psychol.*, 1957, 11, 75-78.—Several ways in which Allport's concept of structure may stimulate investigation in traditional psychological areas are suggested. For example, memory and forgetting may be approached in terms of displacement of ongoing processes, and abnormal behavior in terms of rigidity of ongoing processes, resistance to stimulus event, or physiological disruption of the event sequence. There is a stress on the alteration of function rather than upon the stimulation of responses.—R. Davidson.

3491. Swartz, P. **Plato as a critic of behaviorism.** *Psychol. Rep.*, 1957, 3, 67-69.—Plato is quoted at some length to show that he recognized the weakness of a behavioristic approach, indicating that physiological reductionism is no substitute for explanation of behavior in terms of stimulus and experiential factors.—C. H. Ammons.

3492. Szasz, Thomas S. **A contribution to the psychology of bodily feelings.** *Psychoanal. Quart.*, 1957, 26, 25-49.—In an attempt to present a psychologically consistent approach to the problem of mind-body dualism, it is suggested that the ego has three sorts of relationships to the body: a silent feeling of well-being, based upon a preconscious awareness of the body; feelings associated with increased interest in the body coupled with such affects as pain, itching, and bodily estrangement; and feelings associated with decreased interest in the body and loss of interest in human objects. Clinical examples are presented. 41-item bibliography.—L. N. Solomon.

3493. Wellek, Albert. **Die Entwicklung der Grundannahmen der Psychologie und die Überwindung des Phänomenalismus und Psychologismus.** (The development of basic assumptions in psychology and the overcoming of phenomenism and psychologism.) *Jb. Psychol., Psychother.*, 1956, 4, 211-221.—Wundt believed the object of psychology as a natural science was to study events and conditions of consciousness. During the last half century psychology has come to be interested in meaning, being, and value. Important for this development has been the wholistic psychology of Felix Krueger. The more integral psychology is reestablishing its linkage with the humanistic disciplines, making imaginative use of experimentally-derived findings.—E. W. Eng.

METHODS & APPARATUS

3494. Frank, Wallace E. **Instrumentation for bioengineering.** *Science*, 1957, 125, 871-874.—"Engineering is the field of applied science which is con-

cerned with the application of the physical science techniques to problems in medicine and biology. Bioengineering also applies to the general area of the extension of normal and abnormal limits of human physical capabilities." Several examples of instrumentation for bioengineering, including problems of intraocular pressure measurement, endoscopy, a reading device for the partially sighted, guidance and reading devices for the blind, and prosthetic and protective equipment, are discussed.—S. J. Lachman.

3495. Gloye, E., Craig, E., & Carp, F. On replication. *Psychol. Rep.*, 1957, 3, 299.—As there are many tentative results, conflicting theories, and unanalyzed biases, the science of psychology would benefit from continual retesting of experimental findings. This need is emphasized and practical suggestions made for encouraging replication of experiments and publishing the results.—C. H. Ammons.

3496. Gubler, E. V., Kovalenko, E. A., Vasadze, G. SH., & Garber, E. I. Registratsiia uslovnykh i bezuslovnykh dykhatel'nykh refleksov po izmeneniiam legochnoi ventilatsii. (Registration of conditioned and unconditioned respiratory reflexes in terms of alterations in pulmonary ventilation.) *Fiziol. Zh. SSSR*, 1957, 43, 582-585.—A device is described for quantitative registration of conditioned and unconditioned respiratory reflexes in terms of alterations in pulmonary ventilation. It is claimed that "significant new possibilities are revealed for the study of disturbances not only of the function of external breathing, but also of the function of the nervous system in various physiological and pathophysiological states."—I. D. London.

3497. Gurevich, B. KH. Prostoi metallicheskiĭ elektrod dlia zapisi elektoretinogramm u cheloveka. (Simple metal electrode for recording electroretinograms in man.) *Fiziol. Zh. SSSR*, 1957, 43, 281-283.—A method is described for obtaining electroretinographic recordings suitable both in clinical practice and in laboratory research on men.—I. D. London.

3498. Gurevich, B. KH. Ob elektrofiziologicheskikh issledovaniiaakh na vrashchaiushchemsia ob'ekte. (On electrophysiological investigations on rotated subjects.) *Fiziol. Zh. SSSR*, 1957, 43, 367-370.—A device is described for use in electrophysiological research on laboratory animals under rotation.—I. D. London.

3499. Kasl, Stanislav V., & Mahl, George F. A simple device for obtaining certain verbal activity measures during interviews. *J. abnorm. soc. Psychol.*, 1956, 53, 388-390.—This paper describes a new instrument devised by G. F. Mahl to determine the duration of time spent talking by the participants in psychotherapy, and the amount of time the patient is silent during successive 2-minute intervals of individual interviews as well as during larger and variable time intervals.—A. S. Tamkin.

3500. Kozhevnikov, V. A., & Soroko, V. I. Opyt konstruirovaniia differentsial'nykh usilitel' dlia registratsii biopotentsialov bez ekranirovaniia ob'ekta. (Construction of differential amplifiers designed for registration of biopotentials without screening of the subject.) *Fiziol. Zh. SSSR*, 1957, 43, 187-191.—Details are given for the construction and operation of differential amplifiers designed to record

action potentials without screening the subject.—I. D. London.

3501. Kurczówna, Ida. O dwojakiej funkcji słowa jako bodźca. (On the twofold function of the word as a stimulus.) *Studia psychol.*, 1956, 1, 26-55.—As a result of experimental investigation with the use of the method of "exceptional stimuli" (see 32: 3507), the author found that a word which is known to the subject may be for him a stimulus acting either on the first signal system or on the second. In the first case subjects reacted to the sound, in the second to the meaning of the stimulus word, depending on the task which the subject has to perform. 28 persons were investigated, stimuli (words read) and reactions (squeezing of rubber pear) were recorded on kymographic paper.—M. Chojnowski.

3502. Pudritzki, Günter. Eine elektronische Anordnung zur Bestimmung der optischen Verschmelzungsfrequenz mit beweglicher Beobachtungsbrille. (An electronic apparatus for the determination of optical fusion frequency with movable observing glasses.) *Z. Psychol.*, 1957, 160, 302-306.—The apparatus consists of an R-C generator, a two-step amplifier, and the glasses. The test field is affixed to the latter, and is connected to the amplifier. As source of light a 110 volt flimmer bulb is used, whose emanations appear in rectangular form on an oscilloscope. The movable glasses permit frequency measurements in various body positions of the subject. The change from flicker to fusion and vice versa can be determined rapidly and read off to the nearest $\frac{1}{4}$ cycle per second.—K. M. Newman.

3503. Riudiger, V. Prostoi pribor dlia registratsii sliunootdeleniia u sobaki v usloviakh svobodnogo peredvizheniia. (Simple appliance for registration of salivation in dogs under conditions of free movement.) *Fiziol. Zh. SSSR*, 1957, 43, 364-366.—A device is described which records salivary secretion accurately even with violent movement of the head. The device permits simultaneous registration of respiratory, motor, and salivary reactions.—I. D. London.

3504. Shakhnovich, A. R., & Shakhnovich, V. R. Pribor dlia izmereniia izobrazhenii zrachka na kinolente (s pomoshch'iu fotozapisi.) (Apparatus for measuring pupillary images on cinematographic film (by means of photographic records).) *Fiziol. Zh. SSSR*, 1957, 43, 279-280.—A description of a method for obtaining curves of pupillary reactions is given along with that of the instrument employed. Decrease in time, necessary for obtaining the curves, and increase in reliability of results are claimed for the new instrument.—I. D. London.

3505. Sokolov, E. N. Metodika izucheniiia kozhno-gal'vanicheskikh i dvigatel'nykh uslovnykh refleksov u cheloveka. (Method for studying skin-galvanic and motor conditioned reflexes in man.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 630-633.—A method of joint registration of skin-galvanic and motor reflexes is described which, when employed with standard equipment, introduces a "high degree of exactness" into the study of higher nervous activity.—I. D. London.

3506. Suhr, Virtus W. Comparing inventory items by use of IBM punch cards. *Proc. Iowa Acad. Sci.*, 1956, 63, 581-585.—The use of IBM punch cards for recording data from which studies

on driving safety can be made is discussed.—C. F. Haner.

3507. Tomaszewski, Tadeusz. *Badanie wyższych czynności nerwowych człowieka metodą "bodźców wyjątkowych."* (Investigation of higher nervous activities of the man with the method of "exceptional stimuli.") *Studia psychol.*, 1956, 1, 9-25.—Not satisfied with the present methods of the investigation of higher nervous activities in the man, the author describes his method of "exceptional stimuli" in which the examined person is instructed to react in the same way to all of various stimuli with the exception of some single one to which it has to react in different way. This method allows many modifications and is very easy to apply. The author reviews a number of experimental results, interprets them as the interplay of excitation and inhibition according to the laws of the dynamics of cortical processes, and points to some further perspectives in the use of this method.—M. Chojnowski.

3508. Wilcott, R. C. *Subliminal stimulation vs. psychophysical thresholds.* *Percept. Mot. Skills*, 1957, 7, 29-36.—Review of the literature shows that the different experimental methods for defining and studying subliminal stimulation lead to inconsistent results. One finds that stimuli which are "subliminal" in one kind of experiment are not in another. It is necessary to recognize that the different definitions cannot be used interchangeably. First, there must be empirical determinations of the degree of similarity among the definitions. Consistency in results will follow.—C. H. Ammons.

(See also Abstracts 3608, 3751, 3872, 3976)

NEW TESTS

3509. Duhm, Erna, & Hansen, Jutta. *Der Rosenzweig P-F Test; Form für Kinder; Handanweisung.* (The Rosenzweig P-F Test; children's form; manual.) Göttingen, Germany: Hogrefe Verlag für Psychologie, 1957. 22 p. 5.30 DM.—This is the German language manual for the children's form of the Rosenzweig Picture Frustration Study, complete with directions for administration, scoring, and interpretation, as well as examples and normative data.—H. P. David.

3510. Hardesty, Francis P., & Priester, Hans J. *Handbuch für den Hamburg-Wechsler Intelligenztest für Kinder.* (Manual of Hamburg-Wechsler Intelligence Scale for Children.) Stuttgart, Germany: Verlag Hans Huber, 1956. 119 p.—The manual of the adaptation of the Wechsler Intelligence Scale for Children (WISC) for German children from 6 to 15 years of age gives detailed instructions for administering the test. The evaluation of the performances follows the WISC closely, tables of scores and IQ tables are included into the Hamburg-Wechsler Intelligenztest für Kinder (Hawik).—W. J. Koppitz.

3511. Hörmann, Hans, & Moog, Wolfgang. *Der Rosenzweig P-F Test; Form für Erwachsene; Handanweisung.* (The Rosenzweig P-F Study; adult form; manual.) Göttingen, Germany: Hogrefe Verlag für Psychologie, 1957. 22 p. 5.30 DM.—This is the German language manual for the adult form of the Rosenzweig Picture Frustration Study. It provides directions for administration, scoring, and

interpretation, complete with examples and normative data.—H. P. David.

3512. Horn, Wolfgang. *Begabungstestsystem; Handanweisung.* (Aptitude Test System; manual.) Göttingen, Germany: Hogrefe Verlag für Psychologie, 1956. 14 p. 4.00 DM.—This brief manual contains instructions for administering, scoring, and interpreting the "Aptitude Test System," a battery of short paper and pencil speed tests of academic achievement, intelligence, concentration, etc. Also included is a Draw-A-Man test. It may be individually or group administered in 90 minutes to children over 7.5 years old. Standardization and normative data are reported.—H. P. David.

STATISTICS

3513. Baggaley, Andrew R. *A table to facilitate comparison of proportions by slide rule.* *Psychol. Bull.*, 1957, 54, 250-252.—For extreme proportions the sampling distribution of differences is highly skewed precluding the use of the normal distribution to test significance. However, there is available a transformation which permits the investigator to use the normal distribution function even with extreme proportions. This paper presents a quick method for using one of the adaptations of this transformation.—W. J. Meyer.

3514. Berkun, M. M. *Twice-told tales about one-tailed tests.* *Psychol. Newsltr.*, N. Y. U., 1957, 9, 7-8.—"In general, the use of a one-tailed test because of prediction of the outcome is questionable, though still defensible."—M. S. Mayzner.

3515. Blumen, Isadore. *On the ranking problem.* *Psychometrika*, 1957, 22, 17-27.—"Observed rankings of objects can be treated as arising from a time dependent probability process. Under such circumstances, associations observed are an indication of the character of this underlying process. In the particular example treated in some detail here, a quantity related to Kendall's tau is found to have an important role and its properties are examined."—M. O. Wilson.

3516. Bozovich, Helen; Bancroft, T. A., Hartley, H. O., & Huntsberger, David V. *Analysis of variance: Preliminary tests, pooling, and linear models.* *USAF WADC Tech. Rep.*, 1956, No. 55-244, Vol. I. vi, 139 p.—Part I considers certain pooling procedures which are based on the theory of "incompletely specified" linear models. Based on size and power curves derived, recommendations are made for the guidance of research workers employing these procedures. Part II describes and illustrates a generalized pooling procedure which utilizes a weighted estimator. Problems concerned with the selection of weighting functions are discussed. 22-item bibliography.—R. T. Cave.

3517. Brogden, Hubert E. *The expected variance of the sampling errors for a set of item-criterion correlations.* *Psychometrika*, 1957, 22, 75-78.—"An expression for the expected variance of the sampling errors for the validities of a set of correlated items that is computationally feasible when the number of items is large is developed. Since the item difficulties are assumed to be constant, the estimate must be applied to pools or sub-pools of items reasonably homogeneous with respect to difficulty."—M. O. Wilson.

3518. Cartwright, Desmond S. A computational procedure for tau correlation. *Psychometrika*, 1957, 22, 97-104.—"The tau coefficient is defined, and a computational procedure for tied ranks is described. The procedure maintains continuous computational checks, saves labor, and particularly facilitates the use of tau with large samples. It is also shown how tau correlation may be applied to Q-sorts with any shape of forced distribution or with unforced distributions."—M. O. Wilson.

3519. David, Herbert T., & Kruskal, William H. The WAGR sequential t-test reaches a decision with probability one. *Ann. math. Statist.*, 1956, 27, 797-805.—"The WAGR test is a sequential procedure for testing the null hypothesis that the proportion of a normal population greater than a given constant is p_0 (given) against the alternative that it is p_1 (given). These are equivalent (after a translation) to hypotheses specifying the value of μ/σ , where μ and σ^2 are the mean and the variance of the normal population under test. We prove that, with probability one, a decision is reached when the WAGR test is applied. This fact is of importance in its own right; it also has indirect interest because, unless it were true, the standard Wald inequalities on probabilities of error at the two hypothesis points could not be applied."—P. Ratoosh.

3520. Delys, L., & Gilbert, L. Fidélité des tests et confiance à leur accord (d'après A. G. Wesman). (Reliabilities of tests and the trust to be put in them (according to A. G. Wesman).) *Rev. belg. Psychol. Pédag.*, 1957, 19, 85-94.—The principal points considered: the importance of reliability, factors affecting the interpretation of reliability coefficients, interval of time between testing, reliability of tests with a time limit, partial and total reliability, reliability of scoring.—R. Piret.

3521. Dwyer, Paul S. The detailed method of optimal regions. *Psychometrika*, 1957, 22, 43-52.—"The detailed method of optimal regions is an extended form of the method of optimal regions which has been found effective in solving the personnel classification problem when the number of job categories is small. The automatic determination of the successive values of the v_j , made possible by the more complex problems and provide solutions, which, for the most part, can be mechanized."—M. O. Wilson.

3522. Edwards, Allen L. Statistical analysis. (Rev. ed.) New York: Rinehart, 1958. xii, 234 p. \$4.00.—This revision of the author's "Statistical analysis for students in psychology and education" (see 20: 2965), "presents elementary statistical theory in a way that will be intuitively meaningful to the nonmathematically trained student" with little stress placed on calculative skills." Much of the material in the first edition has been eliminated; that which is retained has been rewritten, and much new material has been added. The Workbook designed to accompany the text provides exercises which review the materials contained in the text. 32 references.—A. J. Sprov.

3523. Fletcher, N. C., & Shephard, A. H. Interpretation of data as a function of units of measurement. *Canad. J. Psychol.*, 1957, 11, 65-70.—To demonstrate that data are characteristically influenced by the size of the measurement interval, the same prolonged performances are measured using different

time intervals. Significant differences in relationships are clearly evident. At times differences between the results of two studies on the same problem may be attributable to differences in measurement intervals.—R. Davidson.

3524. Goldberg, Samuel. Introduction to difference equations with illustrative examples from economics, psychology, and sociology. New York: Wiley, 1958. xii, 260 p. \$6.75.—"This book is primarily intended for social scientists who wish to understand the basic ideas and techniques involved in setting up and solving difference equations." The introductory chapter illustrates how difference equations arise in the context of social science problems. Chapter 1 develops the calculus of finite differences. Chapter 2 introduces difference equations. Chapter 3 treats linear difference equations with constant coefficients. The final chapter is devoted to equilibrium and stability, first-order equations and cobweb cycles, a characteristic-value problem, generating functions, and matrix methods.—A. J. Sprov.

3525. Guttman, Louis. A necessary and sufficient formula for matrix factoring. *Psychometrika*, 1957, 22, 79-81.—"For the purpose of extracting factors from matrices, it is proved that a certain formula is both necessary and sufficient. In factor analysis, the formula may be applied either to the correlation matrix, or directly to the score matrix (assuming the communality problem is solved). As many factors as desired can be extracted in one operation. Having such a compact formulation is useful for teaching as well as computing purposes, since it includes all techniques of factor extraction as special cases."—M. O. Wilson.

3526. Harman, Harry H. Statistical methods. *Annu. Rev. Psychol.*, 1958, 9, 213-242.—This survey of the literature pertinent to quantitative methodology in psychology to May 1957 includes a 143-item bibliography.—A. J. Sprov.

3527. Henrysson, Sten. Applicability of factor analysis in the behavioral sciences: A methodological study. Stockholm, Sweden: Almqvist och Wiksell, 1957. 156 p.—"This monograph is devoted to an investigation of what type of problems in the behavioral studies ought to be designed and carried out, and how some of the technical problems in connection with the methods of analysis may be solved." The successive chapters deal with the basic theory of factor analysis, the most important factor models (the Spearman school, Burt's factor analytical methods, Thomson's contribution, and Thurstone's school), different applications of factor analysis, factor analysis and theory of science, explanatory factor analysis, factor analysis according to the principles of simple structure, the problem of invariance, and factor analysis from a statistical point of view. 7-page bibliography.—M. Choynowski.

3528. Hayes, J. R. A non-parametric trend test. *Psychol. Newsltr. N. Y. U.*, 1957, 9, 29-34.—"The purpose of this paper is to describe a non-parametric test of trend based on the sign test. Because the tables used in performing the test are already widely available, and because a rational procedure is provided within the test for combining data for several Ss, the author feels that the present test has advantages not found in non-parametric tests of trend described elsewhere."—M. S. Mayner.

3529. Horst, Paul. **Least square multiple classification for unequal subgroups.** *J. clin. Psychol.*, 1956, 12, 309-315.—One might wish to make predictions about an S from a battery of tests whose relation to the criterion measures was known. A procedure is presented, both computationally and analytically, for obtaining the best weights for the tests in the battery when the number of S's in the original criterion classification groups is unequal.—L. B. Heathers.

3530. Keats, John A. **Estimation of error variances of test scores.** *Psychometrika*, 1957, 22, 29-41.—"The representation of test scores as n-dimensional points leads directly to an estimate of error variance at a particular score level in the case of equivalent items. Approximations are suggested for the case of nonequivalent items. These approximations are compared, with satisfactory results, with empirical data prepared by Dr. Mollenkopf."—M. O. Wilson.

3531. Laurendeau, Monique, & Pinard, Adrien. **Une methode rationnelle de localisation des tests dans les échelles d'âge.** (A rational method for placement of test items at a given age level.) *Canad. J. Psychol.*, 1957, 11, 33-47.—A method is described for the placement of test items at a given age level in the development of scales of mental ability. Ideal item difficulty and percentages of success at preceding and following age levels is determined in advance. Scales so constructed come closer to satisfying conditions of transitivity and asymmetry.—R. Davidson.

3532. Lev, Joseph, & Kinder, Elaine F. **New analysis of variance formulas for treating data from mutually paired subjects.** *Psychometrika*, 1957, 22, 1-15.—"The experimental design considered in this paper is one in which each of a group of several subjects is observed in the presence of each of the other subjects of the group, the entire set of possible pairings being repeated or replicated on several occasions. Analysis of variance formulas are described for this somewhat unusual design. Both the model of constants and mixed model are considered. Reliability formulas growing out of the analysis of variance calculations are developed."—M. O. Wilson.

3533. Lubin, Ardie, & Osburn, Hobart G. **A theory of pattern analysis for the prediction of a quantitative criterion.** *Psychometrika*, 1957, 22, 63-73.—"A method of pattern analysis is presented for the case of dichotomous items and a quantitative criterion. This 'configural scale' has maximum validity in the least squares sense. A technique for computing the configural scale as a polynomial function of the item scores is given. Tests of significance are outlined for such questions as: Is there a linear or non-linear relation between the quantitative criterion and the item scores? Does the addition of certain items to the test increase the validity of the configural scale? Are all the items in the configural scale fully effective?"—M. O. Wilson.

3534. Mainland, Donald; Herrera, Lee, & Sutcliffe, Marion I. **Statistical tables for use with binomial samples—contingency tests, confidence limits, and sample size estimates.** New York: Department of Medical Statistics, New York University College of Medicine, 1956. xix, 83 p. \$2.00.—Tables I-IV concern 4-fold contingency tables and present

1% and 5% levels for N's (the number in each sample) from 4 to 500, where the N's are equal; and supply 4-decimal probabilities for all combinations of N's from 1 to 20. Tables V-IX present 80%, 95% and 99% confidence limits for binomial distributions for A's (the number in the smaller class) from 1 to 14, for %A's from 50% to .1%, for $A=0$; and for sample sizes ranging from 2 to 100,000. Table X is useful in estimating sample sizes in binomial experiments.—R. L. McCornack.

3535. Merrill, Warner Jay, Jr. **A non-parametric test of association.** *Dissertation Abstr.*, 1957, 17, 1586.—Abstract.

3536. Merz, Ferdinand. **Bemerkungen zur Technik der Korrelationsrechnung.** (Comments on the technique of correlational analysis.) *Diagnostica*, 1957, 3, 8-10.—A revised method of calculating a product moment correlation is demonstrated, offering a speedier means of obtaining split-half correlations and also rank order correlations.—H. P. David.

3537. Olds, Edwin G., Mattson, Thomas B., & Odeh, Robert E. **Notes on the use of transformations in the analysis of variance.** *USAF WADC Tech. Rep.*, 1956, No. 56-308. iv, 29 p.—Some reasons for needing transformations in analyzing variance are set forth and the possibility of planning experiments so as to lessen the need is noted. The problem of finding the best transformation is discussed. The advantages of formulation rules which would always lead to transformations are stated and a standard procedure for a particular case is exemplified. This is the fifth in a series of reports on analysis of variance. Reference is made to the other published reports in the series and a bibliography of 58 additional publications is included.—R. T. Cave.

3538. Perry, N. C. **A cutting point theory for curvilinear regression.** *Psychol. Rep.*, 1957, 3, 78.—A cutting point for curvilinear regression is given for use in certain industrial situations, such as piecework in industry.—C. H. Ammons.

3539. Radkins, Andrew P. **Some statistical considerations in organoleptic research: Triangle, paired, duo-trio tests.** *Food Res.*, 1957, 22, 259-265.—A procedure is described and illustrated for determining appropriate sample size and critical region, in designing simple taste-test experiments, so as to give consideration to Type II as well as Type I error. The assumption of the binomial distribution of data from such experiments is justified.—D. R. Peryam.

3540. Raiffa, Howard. **Probability and statistics in item analysis and classification problems: Statistical decision theory approach to item selection for dichotomous test and criterion variables.** *USAF Sch. Aviat. Med. Rep.*, 1957, No. 56-139. 76 p.—A basic problem in test construction is the suitable of k out of N test items to be used in predicting an unknown criterion value for the individual taking the test. This report considers a nonparametric model for the problem in the framework of statistical decision theory when both the test variables and the criterion variables are dichotomous. The paper gives a summary of the basic concepts of statistical decision theory relevant for this problem in section 2. In sections 3 and 4, the problem of item selection is considered, first when the potential number of item predictors is small and some reduction is desirable and second when it is desired to select a

small number of predictors from a large battery of potential test items.

3541. Ramchandran, K. V. On the Tukey test for the equality of means and the Hartley test for the equality of variances. *Ann. math. Statist.*, 1956, 27, 825-831.—"The unbiasedness of the Tukey Studentized range test for the equality of means of k univariate normal populations with a common variance and of the Hartley F_{\max} ratio test for the equality of variances of k univariate normal populations is proved."—P. Ratoosh.

3542. Robinson, Elmo A. Choice, chance, and cheating. *Educ. Theory*, 1957, 7, 63-68.—The distinction between mathematical probability and empirical probability is discussed and applications of probability principles to true-false and multiple-choice tests are considered. Probability calculations can be used as evidence in the determination of whether cheating has occurred on an examination. Identity of incorrect answers, especially on a multiple-choice test, is shown to be a more conclusive criterion of cheating than is identity of correct answers.—A. E. Kuenzli.

3543. Roy, S. N., & Kastenbaum, Marvin A. On the hypothesis of no "interaction" in a multi-way contingency table. *Ann. math. Statist.*, 1956, 27, 749-757.—A test for a hypothesis of "no interaction" is suggested in a situation in which observations are frequencies in a multi-way contingency table such that the observations are independent and the total number is fixed from sample to sample. 2 other results (Bartlett's and Norton's) turn out to be special cases of this test.—P. Ratoosh.

3544. Ruch, Floyd L., & Warren, Neil D. Elementary statistics in psychology and education. Columbia, Missouri: Lucas, 1957. 127 p.—Statistical methodology is divided into 2 parts, descriptive statistics and sampling statistics. 6 chapters are devoted to descriptive statistics; these include chapters about frequency distributions, measures of central tendency, measures of variability, the normal curve, and the product-moment correlation. 2 chapters are devoted to sampling statistics, one discussing samples and populations, the other the significance of differences. Self-tests, computational exercises, and their answers are found at the end of the book.—J. S. Ahmann.

3545. Ruch, Floyd L., Warren, Neil D., & Ford, James S. Intermediate statistics in psychology and education. Columbia, Missouri: Lucas, 1958. ii, 133 p.—This book is designed for students of intermediate statistics, graduate students, and supervisors of statistical clerks. Topics covered include chi square, special correlation techniques, partial and multiple correlation, reliability and validity of measurements, statistical prediction techniques, and analysis of variance. Self-tests, computational exercises, and their answers are found at the end of the book.—J. S. Ahmann.

3546. Sakoda, James M., & Cohen, Burton H. Exact probabilities for contingency tables using binomial coefficients. *Psychometrika*, 1957, 22, 83-86.—"The use of binomial coefficients in place of factorials to shorten the calculation of exact probabilities for 2×2 and $2 \times r$ contingency tables is

discussed. A useful set of inequalities for estimating the cumulative probabilities in the tail of the distribution from the probability of a single table is given. A table of binomial coefficients with four significant places and n through 60 is provided."—M. O. Wilson.

3547. Schmid, John, & Leiman, John M. The development of hierarchical factor solutions. *Psychometrika*, 1957, 22, 53-61.—"Although simple structure has proved to be a valuable principle for rotation of axes in factor analysis, an oblique factor solution often tends to confound the resulting interpretation. A model is presented here which transforms the oblique factor solution so as to preserve simple structure and, in addition, to provide orthogonal reference axes. Furthermore, this model makes explicit the hierarchical ordering of factors above the first-order domain."—M. O. Wilson.

3548. Severo, Norman C., & Olds, Edwin G. A comparison of tests on the mean of a logarithmico-normal distribution with known variance. *Ann. math. Statist.*, 1956, 27, 670-686.—"3 test procedures are considered for testing an hypothesis on the mean of a logarithmico-normal distribution with known variance. The first is a normal theory test applied to the logarithms of the original data; the second is a normal theory test applied to the original data; and the third is a test based on the Neyman-Pearson Lemma. The operating characteristics of these tests are developed and some asymptotic properties obtained. It is found that the 3 procedures give quite different results unless the mean under the null hypothesis is large relative to the standard deviation."—P. Ratoosh.

3549. Stanley, J. C. Kimmel's "General Case" for the relationship between chi square and size of sample. *Psychol. Rep.*, 1957, 3, 344.—Kimmel (see 32: 1084) provides a table showing the sum of squared obtained frequencies required for significance at .05 and .01 levels for several values of N (the total frequency) and "number of cells (n)" from 3 through 10. But Kimmel's "general case" is not the usual contingency table with theoretical frequencies determined from the marginal sums. The derivation for Kimmel's Formula 2 is presented.—C. H. Ammons.

3550. Tryon, Robert C. Reliability and behavior domain validity: Reformulation and historical critique. *Psychol. Bull.*, 1957, 54, 229-249.—Determination of the reliability of psychological scales has remained a problem over the last 50 years because of a rigid adherence to unobjective and unrealistic postulates about the nature of measurement. From the general form of the reliability of an unstratified composite several computational formulae are derived. These derivations make no assumptions about underlying factors or of statistically equivalent test-samples but rather are derived on the basis of the objective principles of domain sampling. 27 references.—W. J. Meyer.

3551. Tukey, John W. Variances of variance components: I. Balanced designs. *Ann. math. Statist.*, 1956, 27, 722-736.—Involved in obtaining formulas for variances of estimates of variance components are 3 kinds of assumptions: "of certain amounts of independence, of infinite populations, of

normality of distribution. This paper treats of the case where the latter 2 of these assumptions are removed, leaving only the customary (and dangerous) independence assumptions." Applications are made to balanced single and double classifications, to Latin squares and to balanced incomplete blocks. The general notion of balance for analyses of variance is discussed.—*P. Ratoosh.*

3552. Wilk, M. B., & Kempthorne, O. Analysis of variance: Preliminary tests, pooling, and linear models. *USAF WADC Tech. Rep.*, 1956, No. 55-244, Vol. II. v, 126 p.—The development and interpretation of linear models for a number of standard experimental designs are considered in connection with general experimental conditions. The central features of the philosophy and the detail of the investigations are the concept of "experimental unit" and the use of randomization in the design and analysis of experiments. The main results are the derived models and the expectations of analysis of variance mean squares. 57-item bibliography.—*R. T. Cave.*

(See also Abstracts 3908, 4064)

REFERENCE WORKS

3553. Ferster, C. B. (Ed.) *Journal of the experimental analysis of behavior*. Waltham, Mass.: Metropolitan State Hospital.—"A journal primarily for the original publication of experiments relevant to the behavior of individual organisms. Review articles and theoretical papers will occasionally be invited."—*J. Arbitt.*

3554. Sherman, Dorothy. (Ed.) *Journal of speech and hearing research*. Washington, D. C.: American Speech and Hearing Association.—"Contains articles on general communication research particularly and basic research in speech and hearing disorders. Emphasis is placed on experimentally designed studies but articles are also published on systematics and philosophical communications."—*M. F. Palmer.*

ORGANIZATIONS

3555. Carter, Launor F. On electing the APA president. *Amer. Psychologist*, 1957, 12, 145-146.—"A large number of psychologists do not participate by either nominating candidates or in expressing a choice among candidates on the final presidential ballot. . . . The number of different psychologists nominated for president is large. . . . In 1954, of the ten highest ranking nominees, five are most identified with general experimental psychology, three with social, and one each with developmental and measurement." The Policy and Planning Board urges: "1. That all members of the Association actively participate in the nomination and election of the president by casting ballots; and 2. That in the final election members pay particular attention to the rank order of all five choices."—*S. J. Lachman.*

3556. Educational Testing Service. *Annual Report, 1956-1957*. Princeton: Author, 1957. 96 p.—Board of trustees, officers, division directors, program directors, consultants, committees, report of the president, descriptive listing of current testing programs, published tests for use in schools and colleges, scholarship services for colleges and noncollegiate

sponsors, scholarship sponsors using ETS tests and/or services, finances and administration, auditor's statement, summary of current research projects, publications and speeches of staff members, and an index are included.—*G. C. Carter.*

HISTORY & BIOGRAPHY

3557. Andreeva, V. N., & Fedorova-grot, A. K. Pavel Pavlovich Pimenov (1873-1956). *Zh. vyssh. nervn. Deiatel.*, 1957, 7, 460-462.—Obituary.

3558. ———. Atseret Freud leyom huladto hamea. (Freud assembly on the occasion of the centenary of his birth.) Jerusalem, Israel: Hebrew Univer., 1957. 112 p.—"In this publication there were gathered addresses delivered in the Assembly arranged May 7th, 1956, on behalf of the Hebrew University, the Psychoanalytical Society and the Neuropsychiatric Society in Israel on the occasion of the centenary of Sigmund Freud's birth." The addresses given in the book are: Heilperin, L., Freud's way in neurology; Wulff, M., General basic features of Freud's psychoanalytical psychology; Winnik, H. Z., Freud's impact on psychiatry; Mann, J., Freud's contribution to understanding of psychosis; Zeller-mayer, J., Psychoanalytical elements in the psychosomatic approach; Rotenstreich, N., The philosophy in psychoanalysis; Feigenbaum, A., Freud and discovery of cocaine; Simon, A. E., Freud the Jew.—*H. Ormian.*

3559. Bagchi, Amalendu. *The Indian approach to psychology*. *Educ. & Psychol.*, Delhi, 1956, 3 (1), 1-16.—Contemporary psychological thinking is analyzed in conjunction with its Indian counterpart in order to show that historically Indian psychology and contemporary psychology have 2 totally different backgrounds. Included in the analysis are the old philosophical school, the psychophysics school, the Watson-Pavlov conditioned reflex approach, Gestalt psychology, and Freud's psychoanalytic school.—*H. Angelino.*

3560. Bartlett, Frederic Charles. *Some recent developments of psychology in Great Britain*. Istanbul, Turkey: Baha Matbaasi, 1957. viii, 92 p.—This material (pp. 45-92) consists of 6 lectures delivered in 1956 at Istanbul University and 2 additional ones given at the Technical University at Istanbul and before a military audience in Ankara. The first 3 lectures are historical, covering the war periods of 1914 and 1930, and the post-war period immediately following. References are made to selection tests, submarine detection, machine design and other work. Post-war and contemporary studies of skill, stress, and training and its transfer are the special topics of lecture 4. The following lectures in order treat the growing importance of psychology, development of social psychology, weapons and the man, and the psychology of attack and defence. The pamphlet also contains a Turkish translation of the lectures by Dr. Bëglân Birand (pp. 1-44). Dr. W. R. Miles introduces the English lectures and Dr. Mümtaz Turhan the Turkish translation. There is a portrait of the lecturer.—*J. R. Kantor.*

3561. Boring, Edwin G. Robert Mearns Yerkes (1876-1956). *Yearb. Amer. phil. Soc.*, 1956, 133-140.—Obituary.

3562. Carmichael, Leonard. Lightner Witmer (1867-1956). *Yearb. Amer. phil. Soc.*, 1956, 132-133.—Obituary.

3563. Chisholm, A. R. Vers une nouvelle psychologie australienne. (Toward a new Australian psychology.) *Rev. Psychol. Peuples*, 1956, 11, 63-66.—Australian culture, especially its literature, must seek an idiom, a "psychology," more representative of the nation of Australia than its present tendency often to reflect England. Australian culture runs the risk of becoming sadly artificial if poets, writers, and architects in Australia ignore its heritage from the aborigines. A new "psychology" truly reflecting Australia will help to transform an outpost Dominion of the Empire into an important center for the Empire's relationships with the Asian continent.—R. O. Peterson.

3564. ———. Die psychologischen und pädagogischen Veröffentlichungen von Oswald Kroh. (The psychological and pedagogic publications of Oswald Kroh.) *Jb. Psychol. Psychother.*, 1956, 4, 338-345.—A topical bibliography of books and papers by O. Kroh (1887-1955).—E. W. Eng.

3565. Glover, Edward. Dr. Denis Carroll, 1901-1956. *Brit. J. Delinq.*, 1957, 7, 265-268.—Obituary.

3566. Ives, Margaret. Fifty years of hospital psychology. *Amer. Psychologist*, 1957, 12, 150-151.—"On January 1, 1907, Shepherd Ivory Franz came from McLean Hospital, Boston, to establish a psychological laboratory at Saint Elizabeths Hospital, Washington, D. C., then officially known as the Government Hospital for the Insane." Franz' 1907 laboratory, largely concerned with the traditional psychology areas and physiological, is described. "The transition from the physiological laboratory approach to the modern dynamic clinical methods started with the appointment of Winifred Richmond in 1921." The present training program for student psychologists is "listed as approved by the Education and Training Board of the APA."—S. J. Lachman.

3567. Latham, John. Psychology sixty years ago in Melbourne. *Bull. Brit. psychol. Soc.*, 1957, 31, 33-34.—An account is given of the origins of the study of psychology at the University of Melbourne. Psychology, which was treated as a minor branch of mental philosophy, was expressly limited to the senses and intellect. Other kinds of mental activity or experience were not considered.—P. P. C. Castle.

3568. Melton, Arthur W. The American Psychological Association Distinguished Scientific Contribution Awards for 1956. *Amer. Psychologist*, 1957, 12, 125-133.—On September 2, 1956, the APA Distinguished Scientific Contribution Awards were presented to Kenneth W. Spence, Carl R. Rogers, and Wolfgang Köhler.

3569. Ratner, Sidney. A. F. Bentley's inquiries into the behavioral sciences and the theory of scientific inquiry. *Brit. J. Sociol.*, 1957, 8, 40-58.—An analysis of the life and works of Arthur F. Bentley with an attempt to show how his transactional point of view affects scientific inquiry in behavioral science.—R. M. Frumkin.

3570. Van der Horst, L. Het centenarium van G. J. Heymans. (The G. J. Heymans centenary.) *Ned. Tijdschr. Psychol.*, 1957, 12, 153-158.—Biography and portrait.

PROFESSIONAL PROBLEMS OF PSYCHOLOGY

3571. Ansbacher, H. L. A training unit in individual testing at the undergraduate level. *Amer. Psychologist*, 1957, 12, 151-153.—"An undergraduate training unit in individual testing, conducted properly, is very much in accordance with good educational principles and in the best interests of psychology as a profession." The testing unit takes eight weeks, is part of a two semester course; prerequisites are two semesters of general psychology and one semester of statistics; average enrollment is fourteen students largely psychology majors. Textbooks used at present are Cronbach, the training manual on military psychology, and Terman and Merrill. The test used is the Stanford-Binet Form L. An evaluation of the course including verbatim comments of students is presented.—S. J. Lachman.

3572. Ekstein, Rudolf, & Mayman, Martin. On the professional identity of the clinical psychologist. *Bull. Menninger Clin.*, 1957, 21, 59-61.—"Clinical psychology . . . has not yet learned to reconcile its various identity-models. . . . The future of our young profession lies in the success with which it overcomes this identity-diffusion and achieves for itself a synthesis of the identity-models of helper and scientist, which it can stand for with pride and consistency."—W. A. Varvel.

3573. Engelberts, J. J. Onzekere wetenschappelijkheid enzekere onwetenschappelijkheid. (Uncertain science and certain nonscience.) *Ned. Tijdschr. Psychol.*, 1957, 12, 129-141.—A discussion of the problems, centered around the conflict between the scientific aspirations of psychology and the demands of society, as a critique and rejoinder to Kouwer's "Gewetensproblemen van de Toegepaste Psychologie" (see 32: 2207).—R. H. Houwink.

3574. Freeman, Frank S. On the teaching of psychological tests and testing. *Amer. Psychologist*, 1957, 12, 154-155.—The nature of undergraduate courses involving psychological testing "deserve close study and scrutiny, with a view to self-imposed discipline and improved standards, with respect both to the teaching of psychology as part of a liberal education and to the development of psychology to a high professional level."—S. J. Lachman.

3575. Kouwer, B. J. Geromantiseerde wetenschap. (Romanticized science.) *Ned. Tijdschr. Psychol.*, 1957, 12, 231-233.—A rejoinder to the critique of Engelberts (see 32: 3573), stressing the need of psychology to be and remain scientific in method and status.—R. H. Houwink.

3576. Maher, Brendan A. Clinical psychology in Britain: A laboratory for the American psychologist. *Amer. Psychologist*, 1957, 12, 147-150.—"The present status of the clinical psychologist in Britain may permit perspectives on problems relating to standards and curricula of graduate training in university departments and the question of legal, and therefore public, status for the practicing psychologist—chiefly the clinician." In Britain: "Conditions of appointment, standards of training, and promotion for clinical psychologists have been outlined in a series of official memoranda dating from 1951." A number of problems for the psychologist in Britain are considered.—S. J. Lachman.

3577. Olshansky, Simon. **An evaluation of rehabilitation counselor training.** *Voc. Guid. Quart.*, 1957, 5, 164-167.—A survey of 18 university curricula in rehabilitation counselor training provides the author with the factual basis for his belief that this training places too much emphasis upon psychological content and not enough on other counselor needs. Some of these needs are: information about jobs, job choice, opportunity and possibilities, and other practical aspects in vocational rehabilitation. "... a balanced training program should be made up of ... one part psychology and one part industrial sociology." The author's philosophy is reflected by: "The ultimate test, measure, and justification of all vocational rehabilitation services is employment." A balanced training program would effectuate this objective.—F. A. Whitehouse.

3578. Rubin, Stanley Irwin. **A study of the self-concept of function within the profession of counseling psychology.** *Dissertation Abstr.*, 1957, 17, 1587.—Abstract.

3579. Stanley, J. C., & Thomasson, P. **Peer-rated creativity of prominent psychometricians.** *Psychol. Newsstr.*, N. Y. U., 1957, 9, 1-6.—"The investigation suggests 5 factors positively related to the creativity of 25 measurement specialists as rated by each other via paired comparison. . . ." It is concluded that precocity and overall productivity are not important factors.—M. S. Mayzner.

3580. Wall, W. D. **Beruf und Ausbildung der Psychologen.** (The profession and training of psychologists.) *Schweiz. Z. Psychol. Anwend.*, 1957, 16, 241-252.—In the training of psychologists for their work in the community, particularly in the educational system, some integration should be attempted. The most important professional tool of the psychologist is his own personality. It should be utilized in the dual function of rigorous scientific inquiry as well as in the subsequent action in which he is personally involved. While university training should be thorough and rigorous, professional training should contribute directly to his personal development. Consideration might be given to the postponement of even basic university studies until the complete maturation of personality has been reached. In any case, the teachers of psychology, even on an academic level, need profound knowledge of psychological development in order to be able to assist their students adequately with their growth problems. English and French summaries.—J. W. House.

(See also Abstracts 4500, 4704)

PHYSIOLOGICAL PSYCHOLOGY

3581. Arinchin, N. I. **Osobennosti korkovoi regulatsii tonusa sosedov i venoznogo davleniia krovi u cheloveka.** (Features of cortical regulation of vascular tonus and of venous blood pressure in man.) *Zh. vyssh. nervn. Deiatel.*, 1957, 7, 224-230.—Conditioned stimuli (metronomic) were reinforced by: (1) increasing the pressure in a cuff applied to the shoulder region leading thereby to increased pressure of the venous blood up to the minimum arterial level and to increased volume of the left arm; and (2) isolated clamping of the brachial artery, causing depletion of the vessels, lowered pressure, and reduced volume of the left arm. The conditioned re-

flexes which set in were of one and the same nature, namely, diminution of extremity volume, vasoconstriction, and rise of venous pressure. "Due to irradiation of the cortical processes," the changes, thus induced, were manifested in the other extremities.—I. D. London.

3582. Brožek, Josef. **Physiological psychology.** *Annu. Rev. Psychol.*, 1958, 9, 71-98.—A survey of the literature to June 1957. 168-item bibliography.—A. J. Sprov.

3583. Chauchard, Paul. **Poids du cerveau et poids du corps.** (Brain and body weights.) *Année psychol.*, 1956, 56, 101-105.—While relationships between gross body and brain weight are futile, nonetheless certain indices of parts may prove fruitful in establishing correlations with intelligence. 19 references.—G. Rubin-Rabson.

3584. Koshtoiants, KH. S., & Kokina, N. N. **O roli sistemy atsetilkholin-kholinesteraza v iavleniiakh gal'vanotaksisa i summatsii razdrazhenii u parametsii.** (On the role of the acetylcholine-cholinesterase system in phenomena of galvanotaxis and of summation of stimuli in paramecia.) *Biofizika*, 1957, 2, 46-50.—Anticholinesterase preparations and acetylcholine in small concentrations increase the excitability of paramecia as well as their sensitivity to electric current. Larger concentrations bring on an opposite reaction. The similarity in the action of the two substances indicates that paramecia seem to possess an acetylcholine-cholinesterase system and points to the role of this "enzyme-chemical system in the stimulus-response [pattern] and excitability of protozoa," thus emphasizing its importance in the "pre-nerve stage."—I. D. London.

3585. Krotev, L. B. **O vosstanovitel'nykh dykhatel'nykh i serdechno-sosudistykh usloviykh refleksakh.** (On recovery conditioned respiratory and cardiovascular reflexes.) *Fiziol. Zh. SSSR*, 1957, 43, 219-224.—Respiratory and cardiovascular activity were studied during training for amateur shooting contests. Decrease of the "functional recovery period" after exercise, which is one of the characteristics of efficient training, depends on the establishment of conditioned respiratory and cardiovascular reactions. Thus, on attainment of good training form, breath holding during aiming can be repeated several times within one minute without affecting pulmonary ventilation much due to the establishment of "conditioned compensation." Similarly, pulse rate, after rising up to the moment of firing, returns to basal level within 1 or 2 cardiac cycles in well-trained men, although this is never attained within less than 10 cycles for beginners.—I. D. London.

3586. Zhinkin, N. I. **Paradoks rechevogo dykhaniia.** (Paradoxical respiration related to speech.) *Fiziol. Zh. SSSR*, 1957, 43, 145-155.—The interaction of central and peripheral nervous mechanisms involved in adjustments of respiration subserving vocal speech was analyzed. Roentgenokimographic records of the chest revealed that the expiratory movement of the diaphragm is interrupted by inspiration during speech. This paradoxical phenomenon is found to be the means of controlling the power of vocal sounds, which originate in resonating structures. Accentuation of syllables of spoken words depends on fine fluctuations of the diaphragm, modula-

tions of the glottis, and upon bronchial peristalsis.—*I. D. London.*

(See also Abstracts 3503, 4387, 4409, 4699, 4712)

NERVOUS SYSTEM

3587. Aladzhilova, N. A., & Koshtoiants, O. KH. Issledovanie pri pomoshchi mikroelektroodnoy tekhniki kvazipostoianogo potentsiala i ego sverkhmedlennykh kolebaniy na raznykh urovniakh kory golovnoy mozga. (Studies by the microelectrode technique of the quasicontinuous potential and its infra-slow oscillations at various levels of the cortex of the brain.) *Biofizika*, 1957, 2, 327-334.—Quasicontinuous potential and its infra-slow oscillations were studied at various levels of the somatosensory cortex of the rabbit by means of non-polarizable microelectrodes. This potential is termed "quasicontinuous" since it is not quite constant. As the microelectrode progresses deeper into the motor area of the cerebral cortex to a definite level, the registered potential becomes more and more negative with respect to the potential of the cerebral surface. At a certain level the negative potential begins to diminish with deeper penetration.—*I. D. London.*

3588. Ando, Moriaki. A new provocative method of the electroencephalogram by electric stimulation. *Folia psychiat. neur. jap.*, 1956, 10, 236-246.—The author describes a square wave stimulator used to provoke significant EEG abnormalities. With a needle electrode placed on the scalp over the frontal area and 30 seconds to one minute stimulation (10-15 cps, output voltage 10 V) the following findings were obtained: Of 73 epileptic patients with normal EEG after hyperventilation or during sleep 45 (62%) showed EEG abnormalities after electrical stimulation. Of 19 nonepileptic patients (neurological disease, hypertension, alcoholism, etc.) 4 showed such an increase; these were patients with brain tumors and Banti's disease. None of the 23 normal controls exhibited EEG abnormalities in response to this type of stimulation.—*M. L. Simmel.*

3589. Belenkov, N. IU. Funktsii nekotorykh analizatorov u zhivotnykh posle udaleniya kory bol'shikh polusharii. (On the function of some analyzers in animals after removal of the cerebral cortex.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 291-298.—5 decorticated cats were observed for 6 months to 3½ years. The cats reacted to various auditory stimuli with definite signs of elementary localization of sound in evidence. Differentiated conditioned reflexes were elaborated, but only where the auditory signals differed sharply. While decorticated cats approach a light source in a dark room, there is no evidence of object-vision. No loss of taste is in evidence, though finer differentiations are lacking. "The central parts of various analysers are not equally represented in the cerebral cortex. The visual function is the most corticalized in cats; it is followed by the auditory function, while the olfactory and gustatory functions are the least represented in the cerebral cortex."—*I. D. London.*

3590. Bradley, P. B., & Hance, A. J. The effect of chlorpromazine and methopromazine on the electrical activity of the brain in the cat. *EEG clin. Neurophysiol.*, 1957, 9, 191-215.—Both chlorpromazine and methopromazine produce ataxia

and indifference with slow irregular 5-8/sec. waves in the EEG of the conscious, unrestrained cat, but the effects are less marked with methopromazine. Both drugs blocked the behavioral and brain electrical effects of amphetamine and LSD-25, but not the brain electrical effects of atropine or physostigmine. The latter 2 drugs did not modify the behavioral state produced by chlorpromazine or methopromazine. The effects of chlorpromazine on the electrical activity of the encephale isolé and the cerveau isolé are also described. It is suggested that chlorpromazine has a depressant action on the brain stem reticular formation, and that it has an initial excitatory action, only observable before the depressive action appears.—*R. J. Ellingson.*

3591. Briukhanov, O. A., & Lomonos, P. I. O sostoianii protsessa vzbuzhdeniia v kore golovnoy mozga sobak pri vozdeistvii ioniziruiushchikh izlucheni. (On the state of process of excitation in the cerebral cortex of dogs under action of ionizing radiation.) *Fiziol. Zh. SSSR*, 1957, 43, 101-106.—The influence of internal irradiation upon established conditioned alimentary reflexes was studied in 4 dogs. Radioactive phosphorus was administered in doses ranging from 0.16 to 0.70 mC per kilogram of body weight. For 5-10 days after the injection, the conditioned responses were generally lowered, though the relationship between intensity of conditioned stimulus and reaction was not altered. This period was followed by a rise of conditioned activity, which fell to lower levels on the appearance of clinical signs of radiation sickness. At this stage conditioned salivation exhibited phasic reactions.—*I. D. London.*

3592. Bunin, K. V. K voprosu o mekhanizme vzbuzhdaiushchego vlianiia efedrina na tsentral-nuiu nervnuuiu sistemu cheoveka. (On the mechanism of the exciting influence of ephedrine upon the central nervous system of man.) *Fiziol. Zh. SSSR*, 1957, 43, 202-204.—Plethysmographic observations, made upon patients before and after ephedrine administration, disclosed some of the central effects of the drug. "Cortical excitatory action" of ephedrine was also revealed by heightened vascular reactions to verbal equivalents of cold stimuli.—*I. D. London.*

3593. Chertkov, M. A. Izuchenie vyssheĭ nervnoĭ deiatel'nosti u morskikh svinok pri ėksperimental'nom tuberkuleze. (Study of higher nervous activity in guinea pigs with experimental tuberculosis.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 285-290.—A system of conditioned reflexes involving the auditory and optic analyzers was elaborated in guinea pigs of the same age and weight. Following determination of "type of nervous system," the animals were given a subcutaneous tubercular injection in the inguinal region. Within a few hours a disturbance in conditioned-reflex activity appeared, followed by 4 periods of development, with features of each period depending on the predominance of either the inhibitory or excitatory processes in the cerebral cortex. "Animals belonging to the strong, unequilibrated type, with excitatory processes predominant in the cerebral cortex, as well as those belonging to the weak type, are the first to die from tuberculosis, which [fact] is obviously accounted for by the earlier and

extremes exhaustion of the nervous tissue."—*I. D. London.*

3594. Chilingarian, L. I. Kolichestvennye izmeneniia nekotorykh komponentov slunny pri razlichnykh funktsional'nykh sostoiianiakh kory bol'shikh polusharii u sobak. (Quantitative changes of some salivary components in different functional states of the cerebral cortex in dogs.) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 425-433.—Nitrogenous and phosphoric content in the saliva of dogs was studied under the effect of unconditioned and of positive and negative conditioned reflexes. The content of these substances in saliva under the influence of unconditioned stimuli is higher than under that of conditioned stimuli. Nitrogenous and phosphoric concentration in the saliva is diminished under the influence of negative conditioned stimuli as it is with extinction of the conditioned reflex. Disturbances of higher nervous activity tending toward predominance of either the inhibitory or excitatory processes in the cerebral hemispheres are accompanied by both quantitative and qualitative changes in the salivary secretions.—*I. D. London.*

3595. Chistovich, L. A., & Voitsinskii, E. IA. O metode opredeleniia differentsial'noi chuvstvitel'nosti v usloviakh razlicheniia riada signalov. (On the method of determining differential sensitivity under conditions of distinguishing a series of signals.) *Biofizika*, 1957, 2, 142-146.—The feasibility is demonstrated of utilizing logical models in the study of certain variational regularities in the differentiating capacity of man.—*I. D. London.*

3596. Danilov, I. V. Izmenenie elektricheskoi aktivnosti kory golovnogo moga sobak na rannikh stadiakh nevroticheskogo sostoiianiia. (Change in electrical activity of the cortex of the brain in dogs in the early stages of the neurotic state.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 769-775.—Changes in the bioelectrical activity in the brain cortex of dogs were studied under chronic monocular stimulation with intermittent flashes at the rate of 1 per second. These changes in the electric activity of the brain were found to precede changes in behavior. The initial result of the stimulation was the predominance of electric activity in the hemisphere opposite to the illuminated eye, persisting for 3-4 months. Subsequently, the asymmetry of electric activity of the right and left hemispheres disappeared though the conditions of the experiment remained unchanged. The EEG was characterized by an unstable alternation of states of heightened and diminished electrical activity and the emergence of spikes of high amplitude. Beta-shaped activity, intensified in its size and frequency, was the predominant form of electric activity.—*I. D. London.*

3597. Dzhason, I. M. O kortikal'noi regulatsii funktsional'noi svyazi kishechnika i podzheludchnoi zhelezy. (On cortical control over the functional relationship between intestine and pancreas.) *Fiziol. Zh. SSSR*, 1957, 43, 156-163.—Enzyme activity was assayed in pancreatic juice collected at hourly intervals for 4 hours after feedings in dogs with exteriorized pancreatic duct and caecal fistula for stimulation of the intestine through inflation of an inserted balloon. Stimulation was applied under different conditions of "higher nervous activity," modified through presentation of conditioned stimuli and caffeine administration. It was found that ex-

citation depresses pancreatic enzyme activity, whereas inhibition induces enhanced proteolytic enzyme activity in response to stimulation.—*I. D. London.*

3598. French, J. D. The reticular formation. *Sci. Amer.*, 1957, 196(5), 54-60.—A popular discussion of this recently discovered network of cells in the brain. The reticular activating system (RAS) arouses and maintains consciousness and chooses between important and unimportant sensory messages.

3599. Gastaut, H., Jus, A. C., Morrell, F., Storm van Leeuwen, W., Dongier, S., Naquet, R., Regis, H., Roger, A., Bekkering, D., Kamp, A., & Werre, J. Etude topographique des réactions électro-encéphalographiques conditionnées chez l'homme. (Topographic study of conditioned EEG reactions in man.) *EEG clin. Neurophysiol.*, 1957, 9, 1-34.—60 Ss with alpha rhythm or rhythm "en arceau" or both were subjected to UCSs and CSs combined so as to condition the 2 rhythms either independently or concomitantly. Auditory stimuli were combined with visual stimuli in order to condition alpha rhythm alone, and with hand movements to condition the Rolandic rhythm alone. Sound-hand movements were used to condition both rhythms. Processes of central excitation and inhibition as inferred from EEG changes are described, and a neurophysiological interpretation of conditioned EEG Rs is presented. These theoretical formulations involve differential activation of the lower brain stem reticular formation and thalamic reticular system. English summary.—*R. J. Ellingson.*

3600. Gasto, A., Nake, R., Rozhe, A., Donzh'e, S., Rezh, A., Morrell, F., IUs, A., & IUs, S. (Gastaut, H., Naquet, R., Roger, A., Dongier, S., Regis, H., Marrell, F., Jus, A., & Jus, C.) Neurofiziologicheskoe ob'iasnenie uslovnykh elektro-entsefalograficheskikh reaktii. (Neurophysiological interpretation of conditioned electroencephalographic reactions.) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 203-213.—A neurophysiological interpretation is offered of the electroencephalographic phenomena preceding, accompanying, and following the formation of conditioned reflexes.—*I. D. London.*

3601. Gasto, A., Rozhe, A., Donzh'e, S., & Rezh, A. (Gastaut, H., Roger, A., Dongier, S., & Regis, H.) Izuchenie elektroentsefalograficheskikh ekvivalentov protsessov tsentral'nogo vzbuzhdeniia i tsentral'nogo tormozheniia pri vyrobotke uslovnogo refleksa. (Study of electroencephalographic equivalents of processes of central excitation and central inhibition in the elaboration of a conditioned reflex.) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 185-202.—Data are presented to support the hypothesis that there are two forms of excitation and inhibition, differing not in kind, but in their topography. This hypothesis is held to be close to the "classic Pavlovian conception."—*I. D. London.*

3602. Gellhorn, E. Analysis of autonomic hypothalamic functions in the intact organism. *Neurology*, 1956, 6, 335-343.—Following a review of the hypothesis that functional psychoses are the result of changes in hypothalamic reactivity, an analysis of the Mecholyl reaction is presented. The evidence points to the hypotensive effects of Mecholyl being determined by the excitability of the sympathetic portion of the hypothalamus. Further reactions of the circulatory system to pentothal and noradrenalin

lead to the inference "that physiologically parasympathetic and sympathetic functions behave reciprocally at the hypothalamic level." Among the clinical implications of this hypothesis is limitation of the efficacy of shock therapies in patients with normal or over-reactive sympathetic hypothalamic function. 20 references.—*L. I. O'Kelly.*

3603. Gol'din, L. S., & Miasishchev, V. N. **Strukturnye izmeneniia kory golovnogo mozga pri intensivnom vzbuzhdenii po dannym elektronnoi mikroskopii.** (Structural changes in the cortex of the brain with intensive excitation according to the data of the electron microscope.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 621-629.—In a study with white rats as subjects, electric current was used as unconditioned stimulus and sounds of various pitches as conditioned stimuli. The rats were killed at various stages of the establishment and differentiation of conditioned reflexes by dropping them into liquid oxygen or nitrogen where they remained for 3 or 4 seconds. Subsequently superfine sections of the cortex were prepared for electron microscopy. It was found that the neurones of rats killed in a state of intense excitation exhibited more often than the neurones of control rats enlargement of the chromatin granules in the nucleus, an increased nucleolus and its eccentric disposition, and thickening and loosening of the nuclear membrane. Many neurones were also observed in the first stage of degeneration. Hence, a state of intense excitation causes structural changes in the cellular elements of the cortex, which are detectable in great detail with the aid of electron microscopy.—*I. D. London.*

3604. Grosser, George Samuel. **The control of discriminative behavior by stimulation of ipsilateral sites in the striate cortex.** *Dissertation Abstr.*, 1957, 17, 2072.—Abstract.

3605. Harkmark, W. **The influence of the cerebellum on development and maintenance of the inferior olive and the pons.** *J. exp. Zool.*, 1956, 131, 333-371.—On the 5th day of incubation 84 chick embryos received cerebellar injury, and the sequelae of the lesions were studied during a three week post-operative period. Secondary degeneration of cells in inferior olive and pontine nuclei was first evident during the 13th day of embryonic life and progressed through the 19th day. The findings are interpreted as negating the hypothesis that nerve fibers must be present at the time of injury for secondary damage to occur in brain stem nuclei.—*R. T. Davis.*

3606. Il'inskiĭ, B. V. **Bezuslovnye i uslovnye sosudistye reaktsii u bol'nykh grudnoi rhaboi.** (Unconditioned and conditioned vascular reactions in sufferers from angina pectoris.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 231-240.—3 types of volume pulse curves are observed in sufferers from angina pectoris: labile, inert, and intermediate. "Vascular reactions of these patients display a number of considerable deviations from the normal, which are more often manifest in the inert type of plethysmogram and especially under the action of stimuli directed to the second signal system. Orienting and unconditioned vascular reactions are frequently inadequate, that is, inverted; sometimes under the action of strong stimuli in particular they are absent or become asymmetric. The elaborated conditioned reactions are unstable and often inverted; a stable differ-

entiation cannot be obtained even after long training of the patient."—*I. D. London.*

3607. Il'iuchenok, R. IU. **Deistvie tropatsina na deiatel'nost' vysshikh otdelov tsentral'noi nervnoi sistemy u sobak.** (Action of tropacin on activity of higher divisions of the central nervous system in dogs.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 254-262.—Administration of tropacin in optimal doses, which depend on type of nervous system of the dog, considerably enhanced conditioned and unconditioned salivary reflexes. A twofold and, particularly, a tenfold increase in the optimum dose resulted in a decrease of conditioned reflexes, increased latency, and the development of phase phenomena. When an optimum dose was introduced daily over a period of 15 days, conditioned reflex activity underwent steady fluctuation; increase in the unconditioned reflexes was, however, constant. Administration of tropacin in cases of experimental neurosis proved to have a positive therapeutic effect.—*I. D. London.*

3608. Krasnogorskiĭ, N. I. **Novye dannye po fiziologii rechevoi deiatel'nosti.** (New data on the physiology of speech activity.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 513-524.—Employing new recording apparatus in conjunction with a conditioned-reflex technique, it was possible to obtain further data on speech activity and so to cast light on "type of nervous activity" of a child and on his thought processes. Representative data are presented.—*I. D. London.*

3609. Kratin, IU. G. **Otrazhenie nekotorykh storon analizatornoi deiatel'nosti v elektroentsefalogramme cheloveka.** (The reflection of some aspects of analyzer activity in the electroencephalogram of man.) *Fiziol. Zh. SSSR.*, 1957, 43, 134-144.—It is shown that after repeated stimulation in different sounds produce little change in the EEG pattern, whereas a conditioned auditory stimulus is regularly followed by a prolonged burst of alpha-rhythm. A narrow auditory differentiation-stimulus also produces an outburst of alpha-rhythm, the latter being the more intense, the narrower the differentiation. During establishment of a conditioned motor reaction, a burst of alpha-rhythm appears in response to the auditory stimulus.—*I. D. London.*

3610. Liublina, E. I. **Znachenie malykh doz bromistogo natriia pri deistvii porogovykh koncentratsii narkotikov na vysshuiu nervnuiu deiatel'nost' krolika.** (Effect of small doses of sodium bromide on higher nervous activity in rabbits through action of threshold concentrations of narcotics.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 447-450.—Through a conditioned-reflex study of the regulatory role of bromides in restoration of higher nervous activity in rabbits, disturbed by narcotics, it was found that intravenous or subcutaneous administration of sodium bromide in doses of 5-10 mg/kg, preliminary to or simultaneous with the action of narcotics (acetone, dichlorethane or benzene), prevents disturbance of higher nervous activity, caused by the action of threshold concentrations of narcotics.—*I. D. London.*

3611. Livshits, N. N. **Rol' nervnoi sistemy v reaktsiiakh organizma na deistvie elektromagnitnogo polia ul'travysokoi chastoty.** (Role of the nervous system in the reactions of the organism to the action of an electromagnetic field of ultra-high-

frequency.) *Biofizika*, 1957, 2, 378-387.—Data are presented and the literature reviewed to show that the influence of ultra-high-frequency electromagnetic fields brings about functional changes in all parts of the central and peripheral nervous system. The changes, induced in the reactions of the organisms, may be traced to the influence of the field on the tissues and to that on the nervous system, with the latter influence predominant when the field is not too intense.—I. D. London.

3612. Livshits, N. N. **Uslovnoreflektornaya deiatel'nost' sobak pri lokal'nykh polekh UVCH na nekotorye zony kory bol'shikh polusharii.** (Conditioned-reflex activity of dogs under local action of ultrahigh frequency fields on the cerebral cortex.) *Biofizika*, 1957, 2, 195-208.—Exposure of certain areas of the cortex of dogs to ultrahigh frequency (from 7 to 55 watts) causes reversible changes of conditioned-reflex activity. A decrease in positive conditioned reflexes was observed in certain cases, while in others a deterioration of differentiations was observed. In two experiments, a decrease of the conditioned reflexes and a deterioration of differentiations were observed in different phases after a single exposure. The reactivity of the cortex to ultrahigh frequency fields is subject to sharp variations even in the same animal. Reactions of the cortex to ultrahigh frequency fields depend on the localization of exposure and on the typological peculiarities of the animal.—I. D. London.

3613. Lurii, A. R. **O reguliruiushchei roli rechi v formirovaniі proizvod'nykh dvizhenii.** (On the regulatory role of speech in the formation of voluntary movements.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 645-662.—It is shown that, "in the early stages of development, regulation of voluntary motor reactions in the child by means of connections involving adult speech instruction" is insufficiently evolved and that "more direct and active forms of reinforcement" must be utilized for "successful establishment of voluntary movements." In the earliest stages of development an effective form of reinforcement is "supplementary exteroceptive afferentation, which arises as a result of the successful performance of the act itself and which guarantees not only the reinforcement of the adequate reaction, but also the inhibition of that irradiating excitation which leads to the arousal of inadequate reactions." At later stages of development "supplementary afferentation, arising from the child's own speech reactions," can play the regulatory role so that the speech system of the child lends to the child's voluntary motor processes a self-regulatory character. For this reason, in pathological states of the brain, strengthening of the weakened speech components of the complex functional system behind voluntary motor reactions can lay the foundation for compensation of defects.—I. D. London.

3614. Malorchik, V. E. **Vyrazhenie dinamiki nervnykh protsessov na elektroentsefalogramme v zavisimosti ot iskhodnogo funktsional'nogo sostoiianiia kory golovnogo mozga.** (Expression of the dynamics of nervous processes in the electroencephalogram as a function of the initial functional state of the cortex of the brain.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 612-620.—Physiological analysis of EEG's of subjects with organic lesions of the brain shows that cortical electrical reaction to a stimulus

is a function of the initial functional state. This is also to be demonstrated during the various stages of epileptic seizure.—I. D. London.

3615. Naumova, T. S. **Elektrograficheskie dannye k voprosu o parnosti raboty polusharii.** (Electrographic data on bilateral activity of the cerebral hemispheres.) *Fiziol. Zh. SSSR*, 1957, 43, 310-316.—Utilizing electrographic conditioned-reflex techniques, it was shown that the "character of the interrelation of the cerebral hemispheres is dependent on the level of their excitation."—I. D. London.

3616. Negovskii, V. A., Makarychev, A. I., & Popova, A. V. **Dinamika izmenenii uslovnykh oboronitel'nykh refleksov zhivotnykh, ozhivlennykh posle klinicheskoi smerti.** (Dynamics of changes in the conditioned defensive reflexes of animals, revived after clinical death.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 584-596.—Three-minute clinical death in dogs leads to profound changes in the activity of the higher parts of the central nervous system. However, the functional changes caused by such death are reversible, as seen in restoration of previously elaborated conditioned reflexes. Fine differentiation of signals, readily performed before clinical death, however, becomes a difficult task after revival. After revival, the process of excitation is the first to be restored and the quickest; active internal inhibition undergoing restoration much later. The restoration of the basic properties of the nervous processes in the higher parts of the central nervous system (strength, lability, equilibration) after revival depends not only on the duration of clinical death, but on the initial functional state of the nervous system and its individual properties. It is concluded that the cortical functions are the first to suffer on clinical death and the last to undergo repair after revival.—I. D. London.

3617. Nesmeianova, T. N. **Tormozhenie dvigatel'nykh refleksov u spinal'nykh sobak v usloviakh khronicheskogo eksperimenta.** (Inhibition of motor reflexes in spinal dogs under conditions of chronic experimentation.) *Fiziol. Zh. SSSR*, 1957, 43, 301-309.—Reflex movements of the hind limbs in spinal dogs can be inhibited under the influence of reiterated subthreshold stimulations. Inhibition thus established and reinforced as a result of a long series of stimulations persists over a long period. Reflex movements are not observed to appear earlier than 1.5 to 2 months in dogs which had been at rest after establishment of experimental inhibition. After 2.5 months activity of reflexes becomes somewhat higher and more constant than it was initially. "It may be assumed that the origin and nature of spinal reflex inhibition, developing as a result of subthreshold cutaneous stimulations, are somewhat similar to cerebral inhibition in sleep and that it belongs to a type of defensive inhibition."—I. D. London.

3618. Novikova, L. A., & Sokolov, E. N. **Issledovanie elektroentsefalogrammy, dvigatel'nykh i kozhno-gal'vanicheskikh reaktsii pri orientirovannykh i uslovnykh refleksakh u cheloveka.** (Investigation of the electroencephalogram and the motor and skin-galvanic reactions in the orienting and conditioned reflexes in man.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 363-373.—Records of EEG, skin-galvanic reactions, eye movements and motor reactions of the hand in orienting and conditioned reflexes were made

with healthy adults as subjects. Indifferent photic, acoustic, and tactile stimuli, applied for the first time, produce a multicomponent orienting reaction accompanied by alpha-wave depression, skin-galvanic reaction and eye movement in the direction of the stimulus. The reactions progressively diminish as the indifferent signals are repeatedly applied. During conditioning the whole complex of reactions typical of the orienting reflex reappears and resists extinction for a long time. It is assumed that the alpha-wave depression, which appears in the orienting reaction and at the beginning of conditioning, reflects the "process of excitation-diffusion in the cerebral hemispheres."—*I. D. London.*

3619. O'Hare, John J. **A factorial study of the EEG and auditory functions with respect to the alpha scanning hypothesis.** Washington, D. C.: Catholic Univ. Press, 1957. 22 p. 50¢.—Scores of 61 Ss on 61 variables, including indices from a wave analysis of EEG data, scores on a battery of auditory variables, and measures of intelligence and reaction time, were factored by a complete centroid method and rotated to simple structure. 10 factors were derived. No EEG perceptual factor that could be described as an "alpha scanning factor" appeared, although one approached the hypothesized factor, the existence of which was deduced from the alpha scanning hypothesis.—*R. J. Ellingson.*

3620. Penfil'd, U. [Penfield, W.] **Psikhicheskie iavleniia, vyzivaemye elektricheskimi razdrazheniemi kory bol'shikh polusharii.** (Psychic phenomena caused by electrical stimulation of the cerebral cortex.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 532-549.—An expanded version is given of material first presented at the 1954 International Congress of Psychology in Montreal and subsequently read before the USSR Academy of Medical Sciences in Moscow in 1955. The title of the paper was substituted by the editors of the journal to replace the original: "The permanent recording of the stream of consciousness in the human brain."—*I. D. London.*

3621. Petrov, I. P., Raiko, Z. A., & Kudritskaia, T. E. **Sravnitel'naia kharakteristika funktsional'nykh izmenenii i nekotorykh pokazatelei uglevodno-fosfornogo obmena v tkani mozga v agonal'nom periode, pri klinicheskoi smerti i u ozhivlennykh zhivotnykh.** (Comparative characteristics of functional variations and of some indices of carbohydrate-phosphorus metabolism in brain tissue under terminal conditions, during clinical death, and in resuscitated animals.) *Fiziol. Zh. SSSR*, 1957, 43, 107-116.—Certain indices of carbohydrate-phosphorus metabolism were studied in the brain tissue of cats during different phases of impending death and on resuscitation. Metabolic restitution is correlated to functional recovery of conditioned-reflex activity.—*I. D. London.*

3622. Popov, N. F. **Osobennosti vyssheĭ nervnoi deiatel'nosti loshadei.** (Features of higher nervous activity in horses.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 718-725.—Higher nervous activity in horses is subject to the same laws which Pavlov observed in dogs. Horses possess an ability of fine differentiation of light intensity, color, object stimuli, single and complex stimuli, etc. When the "nervous system was overstrained in the course of elaborating fine differentiations," the horses exhibited breakdowns,

sometimes in the form of grave neuroses. By means of the so-called "small testing standard" developed for dogs, the four Pavlovian types of nervous activity were demonstrated.—*I. D. London.*

3623. Robiner, I. S. **Elektroentsefalograficheskiĭ analiz funktsional'nogo sostoiianiia bol'shikh polusharii mozga pri deistvii aminazina.** (Electroencephalographic analysis of the functional state of the large hemispheres under the action of aminasin.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 776-785.—After administration of aminasin, the alpha-oscillations become dominant in the EEG's of healthy and mentally deranged persons, regardless of the initial background of electric activity. From the appearance of the alpha-rhythm in the electrocorticogram and the slowing of the dominant rhythm in the diencephalic electrogram it is concluded that under the influence of aminasin the cortex of the brain comes to a state of reduced afferentiation.—*I. D. London.*

3624. Schneider, J. **Activités rapides de type particulier et troubles du comportement.** (Fast activities of a specific type and disorders of behavior.) *EEG clin. Neurophysiol.*, 1957, Suppl. 6, 271-281.—A relatively rare type of fast activity is described: 25-30/sec. in waxing and waning bursts in the prefrontal and precentral areas of the brain. Data is presented relating this activity to motor, psychoaffective, or vegetative hyperactivity and instability.—*R. J. Ellingson.*

3625. Schwarz, Bert E., & Bickford, R. ginald G. **Electroencephalographic changes in animals under the influence of hypnosis.** *J. nerv. ment. Dis.*, 1956, 124, 433-439.—On many occasions, by means of animal hypnosis, a cataleptic state was induced in 1 frog and 3 guinea pigs. The electroencephalogram showed a tendency toward a slowing in frequency and a disappearance of background rhythms. The state induced is related to drowsiness. 23 references.—*N. H. Pronko.*

3626. Shagass, Charles. **A measurable neurophysiological factor of psychiatric significance.** *EEG clin. Neurophysiol.*, 1957, 9, 101-108.—Sedation threshold, a test determining the amount of IV amobarbital sodium required to produce certain EEG changes accompanied by slurred speech, has been shown to be related to several significant psychiatric variables. This study tests the hypothesis that the threshold is a function of the rate of depressant action of amobarbital on brain activity. Data from 444 Ss showed that amplitude of frontal fast activity provides an index of rate of depression. In confirmation of the hypothesis there was a highly significant inverse correlation between sedation threshold and this index. It is suggested that rate of depressant action measures a time characteristic of neuronal activity, which is probably an important factor influencing cerebral excitability.—*R. J. Ellingson.*

3627. Shimizu, Nobuo, & Kubo, Zenpei. **Histochemical studies on brain glycogen of the guinea pig and its alteration following electric shock.** *J. Neuropath. exp. Neurol.*, 1957, 16, 40-47.—30 healthy male adult guinea pigs were given electroshocks (16 mA, 60 cycles AC, 20 volts) which, on 5-second stimulation, produced tonic-clonic convulsions for about 40 seconds, followed by 1-2 minutes of coma. "Immediately after a single shock the neocortex generally revealed a moderate decrease in glycogen con-

tent in the molecular layer, while the substantia nigra, formatio reticularis of the bulb, and inferior olivary nucleus showed a moderate to slight increase. 10 consecutive shocks resulted in marked depletion of glycogen from most parts of the brain, whereas 5 shocks produced slight raise of glycogen. 1 or 10 days following 10 days' shock moderate to prominent increment of glycogen was noted in the molecular layer of the neocortex, a less marked one occurring in other parts of the brain. The changes of glycogen content following electroshock were confined to the neuropil." 23 references.—M. L. Simmel.

3628. Shipton, Janet, & Walter, W. Grey. **Les relations entre les activités alpha, les modes de pensée et les affinités sociales.** (The relationships between alpha activities, modes of thought, and social affinities.) *EEG clin. Neurophysiol.*, 1957, Suppl. 6, 183-202.—When previously described methods of analysis and display of EEG data are used in the course of psycho-physiological experiment, the personal features of a record are emphasized, and it is possible to follow the changes in distribution of the several alpha components occurring spontaneously or during the performance of diverse tasks. Normal Ss may be classified on the basis of responsiveness or persistence of alpha components, and the resulting classes seem to correspond with psychological estimates of mental imagery and versatility. It has been noticed that an S in one class tends to associate more readily with another S in the same class than with one in another class.—R. J. Ellingson.

3629. Snezhko, A. D. **Ob izmenenii potrebleniia kisloroda tkaniami mozga posle oblucheniia rentgenovymi luchami.** (On changes in oxygen consumption of brain tissue after irradiation with X-rays.) *Biofizika*, 1957, 2, 67-78.—Irradiation of various body parts of rabbits with X-rays induces varying changes in oxygen concentration in the brain. Irradiation of the head or total irradiation brings on, during the hours following exposure, a clearly defined increase in oxygen concentration, which is indicative of a resulting suppression of oxidizing activities in the cerebral cortex. Irradiation of the abdominal area brings on, during the first few hours following exposure, a clearly defined decrease in oxygen concentration in the brain; which fact is taken as an indication of intensified oxidizing activity in the brain. Changes in oxygen concentration in the brain in the case of all forms of action due to ionizing radiation displays a phasic character. A "delay" in the utilization of the "surplus oxygen" in the brain is observed during the terminal stage of the illness.—I. D. London.

3630. Sshastnyi, A. I. **Vyivlenie izbiratel'noi sistemnosti v rabote bol'shikh polusharii sobaki putem podstanovki polozhitel'nykh uslovykh razdrashitel'.** (Detection of the systemic character of election in the cerebral activity of the dog by substitution of positive conditioned stimuli.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 278-284.—In experiments, involving "interaction of 2 elaborated dynamic systems" and carried out by means of the "classic salivary method and motor electrodeless method," the "elective systemic character of cortical activity" was demonstrated. Detection of this systemic character was attained by means of substitution of the initial stimuli in the alimentary system by one or

several positive conditioned stimuli from the defensive system. The formation of elective systems is due to the action of negative induction from the defensive center to the alimentary.—I. D. London.

3631. Stennett, Richard G. **The relationship of alpha amplitude to the level of palmar conductance.** *EEG clin. Neurophysiol.*, 1957, 9, 131-138.—Data from 31 Ss who underwent several experimental conditions designed to produce substantial changes in level of arousal, gave statistically significant support to the hypothesis that an inverted-U relationship exists between these 2 variables. These results suggest that the influence of the particular experimental effect on the EEG being studied be evaluated in terms of the position S occupies on the arousal continuum. A similar study of the entire EEG spectrum might prove valuable.—R. J. Ellingson.

3632. Swain, Edward B. **Psychological factors in intermittent bundle branch block.** *Bull. Menninger Clin.*, 1957, 21, 62-71.—Intensive clinical study and electrocardiograph recordings of a case of bundle branch block of the intermittent type indicated a connection with psychological factors. "The effect of psychological factors appears to be mediated by the autonomic nervous system. Changes in heart rate stimulated by autonomic activity may produce bundle branch block when a certain critical ratio is exceeded. . . . A decrease in chronic tension with concomitant fall in vagal inhibition of conduction in the bundle of his, could cause the disappearance of apparently permanent bundle branch block of several years' duration." 24 references.—W. A. Varvel.

3633. Usievich, M. A. **Znachenie perenapriazheniia razdrashitel'nogo i tormoznogo protsessov kory bol'shikh polusharii dlia sostoiianiia vnutrennei sredy organizma.** (Significance of overstraining the excitatory and inhibitory processes of the cerebral cortex for the state of the internal environment of the organism.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 177-184.—Evidence is presented to demonstrate that, even for the most complex internal interrelations of the organism, the brain is the ultimate "controller" and "allocator" of functions.—I. D. London.

3634. Verhaegen, P. **Bijdrage tot de studie van de verstandelijke begaafdheid van het zwarte ras.** (A contribution to the study of the mental ability of the Negro race.) *Tijdschr. Opvoedk.*, 1957, 2, 56.—An electroencephalographic study of Negroes in the Belgian Congo shows that their electroencephalograms are normal, and demonstrates that the hypotheses that there are genetically determined psychological differences is untrue.—R. Piret.

3635. Vladimirova, E. A. **Vliianie uslovnoreflektornogo vozbuzhdeniia i tormozheniia tsentral'noi nervnoi sistemy na sodержanie ammiaka v bol'shikh polushariakh golovnogo mozga krys.** (Effect of conditioned-reflex excitation and inhibition of the central nervous system upon ammonia content in the cerebral hemispheres of rats.) *Fiziol. Zh. SSSR*, 1957, 43, 117-125.—Utilizing a technique permitting accurate correlation of biochemical data with specific phases of conditioned activity, it was found that "ammonia concentrations in brain tissue of rats rise within 15 seconds from the application of a conditioned stimulus evoking the excitatory process underlying a conditioned alimentary motor reflex. No

appreciable difference in ammonia concentrations in brain tissue, as compared with basal (resting) levels, was found during differential inhibition in experiments with conditioning defensive motor reactions, as well as alimentary motor reactions, unless the onset of an orientation reaction interferes with the inhibitory process, at which time ammonia concentration in brain tissue is found to rise."—*I. D. London.*

3636. Walter, W. Grey, & Shipton, Janet. *La présentation et l'identification des composantes des rythmes alpha.* (The presentation and identification of the components of the alpha rhythms.) *EEG clin. Neurophysiol.*, 1957, Suppl. 6, 177-184.—"Alpha rhythms show variations of topology, amplitude, frequency and phase with respect to one another and . . . to time, so that methods for studying them should envisage a seven-dimensional continuum. No methods yet described approach this ideal, nor is it easy to relate more than a few of these parameters to estimates of mentality or personality." A combination of frequency analysis and toposcopia contains a good proportion of the basic information, but data presented in these coordinates have to be further processed to relate them to changes during an experiment. It has been demonstrated that alpha rhythms are essentially plural and that their differential components are distinguishable by their frequency, phase relations in various regions, domains, and relations to mental changes.—*R. J. Ellingson.*

(See also Abstracts 3483, 3496, 3498, 3501, 3507, 3668, 3674, 3693, 3703, 3727, 3728, 3804, 3837, 3853, 3862, 3866, 3879, 4149, 4222, 4250, 4260, 4339, 4365, 4383, 4400, 4426, 4427, 4451, 4459, 4484)

RECEPTIVE & PERCEPTUAL PROCESSES

3637. Allen, Frank. *The sensations of taste and the logarithmic law of response.* *Z. Psychol.*, 1957, 160, 276-281.—Since a sapid substance cannot be removed with sufficient rapidity for successive independent applications, recourse was taken to the inadequate stimulus of electrical current. DC current excited the sensations of sweet, bitter, and sour. AC current excited those of sour and bitter. Under some conditions sweet and sour sensations were excited together, and bitter and salt together; but sweet and salt never separately. Logarithmically plotted the measurements of Bujas show 4 linear graphs conforming to the Fechner equation: I equals $k \log T$ plus C . German summary.—*K. M. Newman.*

3638. Allen, Frank. *The senses of warmth and cold.* *Z. Psychol.*, 1957, 160, 264-275.—Previous investigations and measurements conformed to the Fechner equation, N equals $-k \log I + C$. In the present paper both senses were investigated by jets of warm and cold air, which were periodically interrupted to give a critical fusion frequency. The graphs obtained conformed to the Fechner equation, D equals $\pm k \log T + C$, where D is the duration of an impulse of air at the critical frequency of fusion, and T is the temperature. The $+$ represents cold measurements, and the $-$ those of warmth. German summary.—*K. M. Newman.*

3639. Alston, William P. *Is a sense-datum language necessary?* *Phil. Sci.*, 1957, 24, 41-45.—Exception is taken to the "claim that there are certain

perceptual situations which can be described only in terms of sense-data." Language is sufficiently flexible to permit description of pseudo-perceptual situations in terms of judgment or opinion rather than sense-data. Both "epistemic" and "phenomenological" modes of expression are essential for the explication of perceptual situations.—*M. B. Turner.*

3640. Ardis, J. Amor, & Fraser, Elizabeth. *Personality and perception: The constancy effect and introversion.* *Brit. J. Psychol.*, 1957, 48, 48-54.—"An investigation of the relationship between shape constancy and introversion-extraversion was carried out, using as subjects twenty-four . . . students . . . ; twelve introverts and twelve extraverts, selected on the basis of the Minnesota TSE scale. Results showed: (a) that introverts showed lower constancy effect than extraverts and (b) that there was a tendency for men to show greater constancy than women." "There was also some suggestion of the presence of a learning factor in the perceptual process which also distinguished introverts from extroverts."—*L. E. Thune.*

3641. Attneave, Fred. *Physical determinants of the judged complexity of shapes.* *J. exp. Psychol.*, 1957, 53, 221-227.—Judgments of complexity were obtained on shapes in which certain physical characteristics were systematically varied. Complexity appeared to be determined by the number of turns in the contour, symmetry, and differences in degrees between successive turns in the contour.—*J. Arbit.*

3642. Baldwin, M., Lewis, S. A., & Frost, L. L. *Perceptual interference after cerebral ablation.* *Percept. Mot. Skills*, 1957, 7, 47-48.—Methods of drug administration, isolating animals, and making behavioral observations are described. Data emphasize the role of the temporal lobe in perceptual disturbance. Results present new information about perceptual disturbance following ingestion of lysergic acid and following sensory isolation.—*C. H. Ammons.*

3643. Barber, Saul B. *Chemoreception and proprioception in Limulus.* *J. exp. Zool.*, 1956, 131, 51-69.—Action potentials were recorded from nerves leading from the gnathobase of *Limulus*. The gnathobase is a medial projection of *Limulus* walking leg coxal segments. It contains medially placed sensory spines which bear groups of sensory cells. Fibers from the distal gnathobase nerve responded to tactile and proprioceptive stimuli and fibers from the proximal nerve responded to chemical, thermal and tactile stimuli. The chemoreceptors did not respond differentially to common salt, sour, sweet, or bitter solutions, but responded vigorously to extracts of marine bivalves.—*R. T. Davis.*

3644. Beecher, Henry K. *The measurement of pain.* *Pharmacol. Rev.*, 1957, 9, 59-209.—A critical and comprehensive review of the measurement of pain is presented, covering the following topics: definition of pain, apparatus and the stimulus for pain, methods for measuring pain, pain threshold and its "constancy" and "purity," analgesic agents and other factors affecting the pain threshold, and the "reaction factors of the pain experience." A section by Frederick Mosteller, on statistical problems in the measurement of pain is included. 687-item bibliography.—*G. A. Heise.*

3645. Birdsall, J. J., Weckel, K. G., & Chapman, R. K. Effects of chlorinated hydrocarbon insecticides on flavors of vegetables. *J. agric. food Chem.*, 1957, 5, 523-526.—Triangular and taste preference tests were used to determine the possible effects of 7 insecticides on 12 vegetable crops. The treated vegetables were served to the panel prepared in normal ways. The panel consisted of 60 persons selected from 125 candidates on the basis of taste acuity to very weak solutions of the 7 insecticides. Each treated vegetable was evaluated for difference against its untreated control by 8-15 panel members and preference estimates were obtained. Flavor changes occurred more often in the canned than in the raw or cooked form and in nearly all cases were undesirable. Storage of the treated products did not induce changes.—D. R. Peryam.

3646. Blum, G. S. An investigation of perceptual defense in Italy. *Psychol. Rep.*, 1957, 3, 169-175.—The present study, an outgrowth of 4 earlier researches linking psychoanalytic theory to perceptual processes, attempted a cross-cultural follow-up of Nelson's demonstration of perceptual defense. Results on 10 Ss in a low accuracy group confirmed the perceptual defense phenomenon: an individual who preferred the avoidance alternative for a Blacky picture in the DPI reported perception of that picture less frequently. Absence of this effect in a high accuracy group provided empirical evidence for the necessity of investigating the effects of personality on perception throughout the continuum of awareness.—C. H. Ammons.

3647. Botha, E. A study of the effect of preference on the perception of size. *J. soc. Res., Pretoria*, 1956, 7, 49-57.—"Recent investigations show that the majority Ss overestimate the size of highly valued objects while they underestimate the size of objects with low value. The investigators seem to agree that the selection of larger symbols for valued objects implies that they are perceived as being larger than life, while the selection of smaller symbols for low valued objects implies that they are perceived as smaller than life-size. No interpretation of results showing the opposite trend, as obtained in some studies, is offered." Dutch and English summaries.—N. De Palma.

3648. Chambliss, Davis Jordan. The relation between judged similarity and the physical properties of plane figures. *Dissertation Abstr.*, 1957, 17, 2070.—Abstract.

3649. Cofer, C. N., & Shepp, B. E. Verbal context and perceptual recognition time. *Percept. Mot. Skills*, 1957, 7, 215-218.—Ss were asked to recognize stimulus words which were briefly exposed following the presentation of standard words which bore either no relation or some degree of synonym relationship to the stimulus words. The results permit the conclusion that, where the standard words are close synonyms of the stimulus words, recognition of the latter is facilitated.—C. H. Ammons.

3650. De Soto, Clinton, & Leibowitz, H. Perceptual organization and intelligence: A further study. *J. abnorm. soc. Psychol.*, 1956, 53, 334-337.—This experiment was a replication of that of Krech and Calvin (Levels of perceptual organization and cognition. *J. abnorm. soc. Psychol.*, 1953, 48, 394-

400) using modified techniques. The correlation previously reported by Krech and Calvin between intelligence and perception, did not obtain upon replication. The data confirmed their finding that progression over trials was usually from low to high perceptual organization, but did not show a correlation between perception and stimulus-exposure time from 0.01 to 1.00 second.—A. S. Tamkin.

3651. Ferris, George E. A modified latin square design for taste-testing. *Food Res.*, 1957, 22, 251-258.—When food samples are judged serially for flavor or other sensory properties errors introduced by involuntary comparison with the sample tasted immediately prior to the one being judged can be controlled by selecting for a particular experiment only those latin squares which are balanced for first-order residual effects. These effects are frequently found to be significant. The statistical model and method of analysis are described and illustrated.—D. R. Peryam.

3652. Flavell, John H., & Draguns, Juris. A microgenetic approach to perception and thought. *Psychol. Bull.*, 1957, 54, 197-217.—"The present paper has been prepared as a microgenetic approach to perception and thought. Within this approach, thoughts and percepts are believed to undergo a very brief, but theoretically important, microdevelopment. Evidence was offered both to support the possibility that such microdevelopments do occur in the normal process of thinking and perceiving and to suggest some of the formal characteristics of such evolutions. Further, an attempt was made to delineate some of the possible implications of this approach for cognitive functioning in abnormal individuals and normal individuals under atypical conditions." 139-item bibliography.—W. J. Meyer.

3653. Fraisse, Paul. Les structures rythmiques: Étude psychologique. (Rhythmic structures: Psychological study.) Louvain, Belgium: Publications Universitaires de Louvain, 1956. viii, 124 p. 125 fr.—A psychological study of musical and verbal rhythm is treated in 9 chapters: rhythmic grouping, temporal structure of rhythmic groups, stability and generality of temporal structures, the dynamic organization of the rhythmic group, the perceptive nature of rhythmic structures, the role of the interval between rhythms and the import of repetition, psychophysiological interpretation of the temporal structure of rhythms, rhythmic accentuation, rhythmic structures in music and poetry.—G. Rubin-Rabson.

3654. Geldard, Frank A. Adventures in tactile literacy. *Amer. Psychologist*, 1957, 12, 115-124.—"The human integument has been the object of precious little research effort on the part of psychologists. The reasons are not easy to ascertain. . . ." The integument is discussed as a receiving surface for several different forms of energy—mechanical, thermal, electrical, and chemical. The discriminative capacities of the skin are considered with regard to the transmission of messages cutaneously, particularly mechanically. 3 primary and independent dimensions of vibratory cutaneous stimulation are indicated: amplitude, duration, and locus. The value of a vibratory language is discussed. A summary of a film "Vibratory Communication Experiments, University of Virginia, 1956" is presented.—S. J. Lachman.

3655. Gibbs, C. B. Servo principles in sensory organization. *Bull. Brit. psychol. Soc.*, 1957, 32 (Inset), 16.—Abstract.

3656. Halpern, L., & Landau, J. The visual field in the sensorimotor induction syndrome and its changes under the influence of colors. *J. nerv. ment. Dis.*, 1956, 124, 487-491.—"In patients suffering from unilateral disequilibrium with the features of the sensorimotor induction syndrome, a characteristic change of the visual field is found."—N. H. Pronko.

3657. Hamlyn, D. Is a theory of perception possible? *Bull. Brit. psychol. Soc.*, 1957, 31, 47-48.—Abstract.

3658. Herman, David T. Perspectives in psychology. *Psychol. Rec.*, 1957, 7, 31-35.—This is the first in a series of papers by this writer and others to evaluate and comment on some psychological issues and data from an interbehavioral frame of reference. The Ames demonstrations in visual perception and the Dewey-Bentley transactional view which relates to these are described briefly. The relationships between the Ames demonstrations, the transactional position and interbehaviorism are explored in terms of J. R. Kantor's interbehavioral treatment of perception. His analysis emphasizes establishing and changing stimulus and response functions which the present writer suggests as an adequate description and interpretation of the Ames demonstrations.—S. C. Ratner.

3659. Holzkamp, Klaus. Ausdrucksverstehen als Phänomen, Funktion und Leistung. (Understanding expressions as phenomenon, function, and outcome.) *Jb. Psychol. Psychother.*, 1956, 4, 297-323.—The scientific study of the perception of expressions is confronted with the contrast between the immediacy and directness with which another person's expressions may be grasped, and the need to assume a mediating cognitive process of some complexity to explain the understanding. Current perception theory, with its emphasis on the transactional nature of perception, has made obsolete the earlier problem formulations assuming a real dichotomy of subject and object factors. At present an approach to these problems based on the formation of communication gestalten and cybernetic theory seems most promising. 62 references.—E. W. Eng.

3660. Hopkin, V. D. Some effects of influence on the perception of an illusion in small groups. *Percept. Mot. Skills*, 1957, 7, 212.—The results indicate that a single group member can influence others' perception of an illusion, and that the others remain unaware of this influence. The same end result could be reached by varying methods in different cases, as shown by the wide variety in the sequence of judgments. The way in which this perceptual change due to influence takes place varies widely, both between the sexes and specifically among individuals.—C. H. Ammons.

3661. Loeb, M. The effects of intense stimulation on the perception of time. *USA med. Res. Lab. Rep.*, 1957, No. 269. ii, 9 p.—Subjects made successive estimations, with feed-back, of 10-minute and 3-minute time intervals by the method of production. Successive judgments without feed-back were then performed in one-hour sessions under conditions of 110 db noise and normal illumination; 80 db noise

and intense illumination; and 80 db noise and normal illumination. No significant differences in time judgments under exposure to intense stimulation (in the conditions of this study) were determined.—R. V. Hamilton.

3662. Masserman, Jules H., & Pechtel, Curtis. Normal and neurotic olfactory behavior in monkeys: A motion picture. *J. nerv. ment. Dis.*, 1956, 124, 518-519.—"Odors are well tolerated by normal monkeys and are less effective than signals in other modalities as cues for learned behavior. However, when the animals are made experimentally neurotic, aversive responses to all olfactory stimuli are markedly increased. During recovery, these aversive effects can be significantly diminished by a deodorant, but olfactory stimuli directly or indirectly associated with the original neurotogenic conflict remain phobogenic longest."—N. H. Pronko.

3663. Pfaffmann, Carl. Taste mechanisms in preference behavior. *Amer. J. clin. Nutr.*, 1957, 5, 142-147.—Electrophysiological evidence on taste sensitivity was obtained by registering afferent nerve impulses. The recording electrodes are placed at the chorda tympani nerve through which most of the taste fibers pass up. The consumption of a solution, as compared with intake of water, constitutes the behavioral response. Responses to solutions varying in the concentration of quinine, hydrochloric acid, sodium chloride and sucrose were studied. The adrenalectomized, salt-needy animal shows a preferential response for salt solutions at all concentrations. At the same time, the electrophysiological threshold for salt remains unaltered. Consequently, the altered behavior reflects not a change in the peripheral afferent neural message but in its significance for central neural processes.—J. Brožek.

3664. Prentice, W. C. H. Perception. *Annu. Rev. Psychol.*, 1958, 9, 1-18.—Annual review to April 1957 with 122-item bibliography.—A. J. Spross.

3665. Schutz, Howard G., & Pilgrim, Francis J. Sweetness of various compounds and its measurement. *Food Res.*, 1957, 22, 206-213.—16 compounds, including sugars, artificial sweeteners, and polyhydroxy alcohols, were rated on a subjective intensity scale, each at 5 logarithmically spaced concentrations, using the method of single stimuli. The relation between concentration and intensity was found to be essentially logarithmic. The ratios of the concentration of each of 15 compounds to the concentration of sucrose at the same sweetness intensity were computed as a measure of relative intensity. "As . . . concentration increases relative sweetness varies in one of three patterns depending on the compound."—D. R. Peryam.

3666. Smythe, E. J., & Goldstone, S. The time sense: A normative, genetic study of the development of time perception. *Percept. Mot. Skills*, 1957, 7, 49-59.—180 Ss varying widely in age were asked simple questions about time and then estimated durations of tones. It was found that: (1) A tendency to overestimate the value of 1.0 sec. is characteristic of all age groups. (2) Time estimations of 1.0 sec. are extremely variable among young children, but this variability decreases with increasing age. (3) Children of 6 and 7 do not learn from specific time information so their ability to estimate 1.0-sec. intervals does not improve. (4) Subjective judgments of

1.0 sec. of children 8 through 14 and adults improve with information. (5) Sex differences do not influence time estimations of short durations. (6) Older adults estimate short time intervals like young adults. (7) Children's estimates of short durations become more like those of adults with increasing age, and are nearly alike by age 14.—*R. B. Ammons.*

3667. Stel'makh, L. N. Osobennosti orientirovochnoi reaktsii na taktil'nye i zvukovye razdrazheniia u sobak v ontogeneze. (Features of the orienting reaction to tactile and acoustic stimuli in dogs in ontogenesis.) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 410-415.—3 stages were observed in the development of the orienting reaction to tactile and acoustic stimuli. The first stage, the "alimentary," lasts from the first to the 15-25th day after birth and is characterized by a generalized reaction often followed by sucking movements and motion toward the stimulus. The second stage, the "defensive," lasts from the 15-25th to the 40-45th day and is marked by "passive defensive behavior," along with relatively localized reaction, in response to initial stimulations. The third stage, the "orienting-investigatory," lasts from the 40-45th day to the 3-4th month. In this stage, as a rule, no signs are observed of passive defensive reactions either during the experiment or outside the experimental situation. Beginning with the 3-4th month, the intensity of the investigatory reflex gradually diminishes, and during that period in most of the puppies, the passive defensive reaction reappears and progresses.—*I. D. London.*

3668. Wells, M. J., & Wells, J. The function of the brain of octopus in tactile discrimination. *J. exp. Biol.*, 1957, 34, 131-142.—Blind octopuses were successfully trained to make tactile discriminations between plastic cylinders that differed in the proportion of surface area that was grooved. They did not learn to distinguish cylinders that differed only in the pattern or orientation of the grooves. It was hypothesized that tactile discrimination in the octopus is a matter of distinguishing frequency of nerve impulses from the receptors in the arms, and that no further information is gained by simultaneous or successive comparisons of the inputs from different nerve fibers.—*B. Weiss.*

3669. Wiley, Robert C., Briant, Alice M., Fager-son, Irving S., Sabry, Jean H., & Murphy, Elizabeth F. Evaluation of flavor changes due to pesticides—a regional approach. *Food Res.*, 1957, 22, 192-205.—Over a 2-year period 5 laboratories co-operated in evaluating the multiple comparisons method of measuring the effect of pesticides on flavor. Test materials consisted of various sets of 4 or 5 differently treated samples of squash and applesauce and were the same for all laboratories. Samples of a set were presented simultaneously to S for rating on a 4- or 5-point quality scale. It was concluded that the method gave results of reasonable uniformity among laboratories. Small selected panels appeared to give a greater range of differences between treatments than larger unscreened groups. S's found the 5-point scale easier to use than the 4-point scale. Use of a reference sample with a pre-assigned rating did not improve precision.—*D. R. Peryam.*

3670. Wittreich, Warren J., & Radcliffe, Keith B., Jr. Differences in the perception of an authority figure and a nonauthority figure by Navy

recruits. *J. abnorm. soc. Psychol.*, 1956, 53, 383-384.—"As predicted from previous work in fear-evoking objects and resistance to perceptual distortion, Navy recruits viewing persons through aniseikonic lenses showed higher distortion thresholds when viewing an authority figure than when viewing a nonauthority figure."—*A. S. Tamkin.*

(See also Abstracts 3818, 3897, 3928, 4724, 4725)

VISION

3671. Allen, Frank. The measurements of visual action-time of McDougall. *Acta Ophthal., Kbh.*, 1957, 35, 20-25.—Replotting of data from McDougall, Exner, and Martius indicates that action-time (i.e., the minimal duration of a stimulus light which yields maximal intensity of sensation) varies inversely with the log of the intensity of stimulation. This holds true within the same limits but with different constants of proportionality for different ranges of intensities. These early observations are remarkably consistent.—*M. M. Berkun.*

3672. Bittini, M., Nicoletti, I., & Ronchi, L. On the application of statistical methods to electroretinography. *Atti. Fond. Ronchi*, 1957, 12, 462-476.—A short literature review is presented. Experiments are done which disclose a tiny wavelet sometimes appearing just at the beginning of the b-wave. A saw-tooth stimulus shape is more effective than the rectangular.—*T. Shipley.*

3673. Blottiau, Félicien. Remarques à propos de la relation entre les fonctions de distribution et la fonction d'efficacité lumineuse. (Remarks concerning the relation between the distribution functions and the luminous efficiency function.) *Rev. Opt. (théor. instrum.)*, 1957, 36, 235-240.—Recent research has indicated that the luminosity function probably is not linearly related to the spectral mixture functions. The author reiterates the need for maintaining constant adaptation conditions in such research and describes a technique for determining simultaneously both kinds of functions under constant conditions of adaptation.—*R. W. Burnham.*

3674. Bongard, M. M., & Smirnov, M. S. Krivye spektral'noi chuvstvitel'nosti priemnikov, svyazannykh s odninochnymi voloknami zritel'nogo nerva liagushki. (Spectral-sensitivity curves of receivers, connected with single fibers of the optic nerve in the frog.) *Biofizika*, 1957, 2, 336-341.—The same single fiber of optic nerve of the frog conducts signals of two receivers with different spectral-sensitivity curves. By receiver is meant "not a single receptor, but a functional system with a definite curve of spectral sensitivity." The signals of these receivers are not interchangeable. Receivers sending signals over one fiber can act simultaneously in one and the same state of adaptation. The spectral-sensitivity curves of receivers connected with different fibers coincide. They are similar to the sensitivity curves of the receivers of frogs which were found when recording impulses from the whole nerve. Receivers with spectral characteristics similar to the "modulators" of Granit are absent in the retina of the frog.—*I. D. London.*

3675. Bongard, M. M. Vizual'naia kolorimetriia metodom zameshcheniia. (Visual colorimetry by the method of replacement.) *Biofizika*, 1957, 2, 119-

123.—Color vision of both the fovea and the periphery may be studied by a new kind of colorimeters, the four-color replacement colorimeter, which enables experiments to be conducted (1) in a broad brightness range (up to 200 asb), (2) at various wavelengths of the basic illumination, (3) at various angular dimensions of the field, and (4) in the case of both dark and bright encirclement of the colorimetric field. The colorimeter may be used to measure the energy of all luminous fluxes that are met with in an experiment. The light passing through any basic slit may be added directly to the illumination being measured. This eliminates in principle the necessity of working "with dilution of light." It correspondingly eliminates the possibility of an additional error due to dilution. It is claimed that the replacement method automatically guarantees observance of the "colorimetric conditions of the experiment" and eliminates the possibility of an error due to differences in the state of the adaptation of the different retinal regions.—I. D. London.

3676. Chew, William B. The effect of varying illumination and distance on performance of subjects with artificially reduced vision. *Dissertation Abstr.*, 1957, 17, 2054.—Abstract.

3677. Chinetti, Peter John, Jr. The effect of reduced exposure duration on simultaneous brightness contrast. *Dissertation Abstr.*, 1957, 17, 2070-2071.—Abstract.

3678. Deese, James. The ability of untrained observers to match visual forms that are slightly disparate in contour. *USAF WADC Tech. Rep.*, 1956, No. 56-570. iv, 13 p.—22 Ss matched 100 pairs of contours defined by 3 points each. These points were plotted by random decision. This explanatory study indicates that shape discrepancy is a factor associated with magnitude of circular error.—R. T. Cave.

3679. Doehring, Donald G., Ward, W. Dixon, & Hixson W. Carroll. The development and standardization of a group test for critical flicker frequency. *USN Sch. Aviat. Med. Res. Rep.*, 1956, Proj. No. NM 001 102 502, Rep. No. 4. iii, 11 p.—The development and standardization of a group CFF test are described. The test can be administered to 10 subjects at a time in a total of 8 minutes. The results of testing 100 naval aviation cadets and 174 naval enlisted men are presented. Response variability between trials and within subjects was minimal, and the test discriminated significantly between the two groups of subjects.

3680. Fiorentini, A., & Radici, T. Binocular measurements of brightness on a field presenting a luminance gradient. *Atti. Fond. Ronchi*, 1957, 12, 453-461.—A binocular method for the quantitative measurement of the Mach bands is found to work very well; $N=2$. The only weakness is that careful fixation must be maintained.—T. Shipley.

3681. François, J., Verriest, G., Mortier, V., & Vanderdonck, R. Over de frekwentie der aangeboren kleurzin-deficiënties bij de mannelijke bevolking. (On the frequency of congenital color-deficiency in the male population.) *Ned. Tijdschr. Psychol.*, 1957, 12, 24-37.—In a random group of over 1,000 Belgian boys, 8.61% of congenitally color-deficient subjects were found. Among these, 11% were protanopes, 17.1% deuteranopes, 11.8% had pro-

tanomaly, 57% deuteranomaly and 0.8% tritanomaly. These data compare favorably with those reported in earlier investigations. Some suggestions are given for the technical improvement of color-deficiency investigation in vocational testing. 73 references.—R. H. Howwink.

3682. Franks, Cyril M. Différences déterminées par la personnalité dans la perception visuelle de la verticalité. (Differences in visual perception of verticality determined by personality.) *Rev. Psychol. appl.*, 1956, 6, 235-246.—An apparatus to measure the degree to which subjects seated in tilted chairs could judge the verticality of a stick displayed against a tilted square background was used with 6 groups of approximately 20 women each. Some were given amphetamin; some, amyltal; some, a placebo; and some, neither medication nor a placebo. Correlations were run between the recorded deviation and tests of introversion and neuroticism. Systematic positive correlations were found between neuroticism and inaccuracy in reporting verticality. 37 references.—W. W. Wattenberg.

3683. Fridrikh, L. Krivye slozheniia tsvetov normal'nykh trikhromatov, naidennye neposredstvennymi ("energeticheskimi") izmereniiami. (Combination curves of the colors of normal trichromates found by direct ("energy") measurements.) *Biofizika*, 1957, 2, 124-128.—For an equal energetic spectrum combination-curves, gotten through direct measurement, are found to differ slightly from the indirectly gotten curves, adopted by the International Illumination Commission. There is thus a difference which must be taken into consideration particularly for the extremes of the visible spectrum. The difference in the colorimetric units of different observers is to be explained, at least in some cases, by the individual properties of the receptors and not by the presence of a "filter" in the eye.—I. D. London.

3684. Fridrikh, L. Ob uchastii palochkovogo zreniia v rabote svetloadaptirovannogo glaza cheloveka. (On the participation of rod vision in the function of the light-adapted eye in man.) *Biofizika*, 1957, 2, 342-347.—Utilizing a "displacement colorimeter," it was shown that vision in the extrafoveal areas of the retina is four-dimensional. A determination of 4 stimulus-value curves for extrafoveal receptors showed that the 4 sets of receptors are constituted of 3 sets of cone receptors and one of rod; the latter operating also in the case of light adaptation and moderate brightness of the test field.—I. D. London.

3685. Galifret, Yves, & Piéron, Henri. De l'erreur systématique que comporte la méthode du papillotement en photométrie hétérochrome. (Systematic error in the flicker method of heterochromatic photometry.) *Rev. Opt. (théor. instrum.)*, 1957, 36, 157-170.—The photometric matching of lights of 670, 535, and 475 $m\mu$ respectively with a fixed light of 585 $m\mu$ (luminance 1 cd/m²) was carried out by the three classical methods, step-by-step, direct comparison, and flicker. From the results obtained it is shown (sic) that if the subject succeeds in giving similar results by the step-by-step and direct comparison methods, he underestimates the red (by a factor 2.6) and the green (by a factor 2.4) using the flicker method (the blue does not seem to be underestimated). By varying the ratio of chromatic to

achromatic light-flux above and below the threshold of color perception during the flickering, it is established that the underestimation of the chromatic light-flux is associated with the perception of color."—R. W. Burnham.

3686. Gerathewohl, S. J., Strughold, H., & Taylor, W. F. The oculomotoric pattern of circular eye movements during increasing speed of rotation. *J. exp. Psychol.*, 1957, 53, 249-256.—Analyzed with regard to form and speed the pattern of guided circular eye movements. Found that as the rotational speed of the object to be tracked increases, the movements of the eye become more frequent and extensive.—J. Arbit.

3687. Glezer, V. D. O roli tonusa zrachkovykh tsentrov v uslovnoreflektornoi deitel'nosti zrachka. (On the role of tonus of the pupillary centers in conditioned-reflex activity of the pupil.) *Fiziol. Zh. SSSR*, 1957, 43, 205-212.—The character of conditioned-reflex pupillary contraction to a stimulus of constant intensity and duration is determined by the initial functional state of the pupillary centers. 6 levels of the functional state, participating in conditioned-reflex pupillary activity, may be distinguished.—I. D. London.

3688. Gloye, Eugene E. Why are there primary colors? *J. Aesthet.*, 1957, 16, 128-131.—After considering the studies of Granit and Hartridge on color receptors, of LeGros Clark on optic fibers, of Kower, and Lenneberg and Roberts on the effect of cultural training on color response, and of research of his own, Gloye concludes that "since hues do not seem to display either universal or stable primacy, they cannot be counted among the 'absolutes' in human experience."—P. R. Farnsworth.

3689. Hopkinson, R. G. Assessment of brightness. *Illum. Engng.*, 1957, 52, 211-222.—The author suggests that a useful engineering scale of apparent brightness can be derived by various methods, including direct estimation.—G. Westheimer.

3690. IArbus, A. L. Novaia metodika issledovaniia raboty razlichnykh uchastkov setchatki glaza. (New method for studying the activity of various parts of the eye's retina.) *Biofizika*, 1957, 2, 163-165.—A method is described which permits any part of the retina to be excluded from the process of perception. It is especially useful for studying the functions and interaction of different parts of the retina in the process of perception.—I. D. London.

3691. Johnson, John Irwin, Jr. Studies of visual discrimination by raccoons. *Dissertation Abstr.*, 1957, 17, 1608.—Abstract.

3692. Mahneke, Axel. Flicker-fusion thresholds: Comparison between the continuous and the discontinuous method. *Acta Ophthalm., Kbh.*, 1957, 35, 53-61.—The two discontinuous thresholds (flicker-to-fusion and fusion-to-flicker) both coincide closely with the continuous fusion-to-flicker threshold, whereas the continuous flicker-to-fusion threshold was independent of the others.—M. M. Berkun.

3693. Makarov, V. A. Ob asimmetrii funktsii zritel'nogo analizatora pri vypolnenii myshechnoi raboty. (On functional asymmetry of the optical analyzer during the performance of muscular work.) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 359-362.—Bi-

lateral electrical sensitivity of the optical analyzer was determined in 46 sportsmen. Asymmetry of sensitivity was observed in 11 sportsmen before training and in 19 sportsmen after training, being more pronounced in persons with the greater part of physical effort concentrated in one of the extremities. Asymmetry of electrical sensitivity of the optical analyzer was also noted when work was done with one hand.—I. D. London.

3694. Mazokhin-Porshniakov, G. A. Otrazhatel'nye svoistva kryl'ev babochek i rol' ul'trafioletovykh luchei v zritel'nykhkhh vospriiatiiakh nasekomykh. (Reflecting qualities of the wings of butterflies and the role of ultraviolet rays in visual perceptions of insects.) *Biofizika*, 1957, 2, 358-368.—The wings of *Gonepteryx*, *Aporia*, *Lycena*, and certain other species exhibit pronounced sexual differences in the reflection of ultraviolet rays. Thus, the male of *G. rhamni* L. reflects about 40% of these rays, whereas the female reflects only 7.5%. This sexual dimorphism or, rather, "dichroism," perceivable by the eye of the insect, is hidden in a number of cases from man's view, as, for example, in the case of the male and female of *A. crataegi* L., which are very much alike. The wings of certain butterflies that appear to the human eye as of one color, have hidden patterns, visible only in ultraviolet light and, hence, perceived by the eyes of these insects.—I. D. London.

3695. Mooney, Craig M. Closure as affected by viewing time and multiple visual fixation. *Canad. J. Psychol.*, 1957, 11, 21-28.—To study the effects of time and multiple visual fixations upon closure, incomplete human faces were projected with: (1) ample time and the opportunity for multiple fixations; (2) ample time and only one fixation; and (3) only a single glimpse afforded. Perceptual performance did not differ significantly under these conditions, and it was concluded that neither viewing time nor eye-movements contribute to the perception of familiar objects.—R. Davison.

3696. Müller, Kurt. Über visuell wahrgenommene Geschwindigkeit sagittaler gerichteter Bewegungen. (Visual perception of velocity of movements in sagittal direction.) *Z. exp. angewand. Psychol.*, 1956, 4, 307-318.—The estimation of the velocity of a moving band in the direction "toward" and "away" from the observer was measured by the method of adjustment. A movement "away" from the observer was judged as faster than a movement of the same velocity (43.5 cm/sec) "toward" the observer. Illumination and field structure have a definite effect upon the errors in judgment. Comparing sagittal movements with horizontal-frontal movements yields a reverse result. The adjustment of the sagittal moving band to a vertical moving comparison stimulus is always faster than the vertical band, however, the error is greater when the sagittal movement is "toward" the observer. English and French summaries.—W. J. Koppitz.

3697. Niuberg, N. D. Kolorimetricheskie eksperimenty kak sredstvo issledovaniia tsvetovogo zreniia i trebovaniia k nim. (Colorimetric experiments as a means of investigating color vision and requirements thereto.) *Biofizika*, 1957, 2, 154-162.—For the optic analyzer, the "only source of correct information about the outside world is the ability to detect visually the objective differences in radia-

tions." "Colorimetric conditions of comparison" are formulated which are necessary and sufficient for color to be a "function only of the objective, physical properties of the radiations under consideration."—*I. D. London.*

3698. Ogle, Kenneth N., & Martens, Theodore G. On the accommodative convergence and the proximal convergence. *A.M.A. Arch. Ophthalmol.*, 1957, 57, 702-715.—The authors propose a fixation-disparity method which "rests on the fact that if a muscular imbalance exists, even in normal binocular observation, the eyes will fail to converge accurately at the point of fixation by a small angle, overconverging in esophoria, underconverging in exophoria." The angular error is small, being measured in minutes of arc, "the images from the two eyes cortically have 'slipped' within the limits set by Panum's areas of fusion." There is extensive discussion of the method applied to clinical patients, particularly concerning the (A-C)/A ratios in myopes and hyperopes in proximal convergence.—*S. Renshaw.*

3699. Radici, T. Alcune considerazioni sopra una nota illusione ottica. (Some considerations of a well-known optical illusion.) *Atti. Fond. Ronchi*, 1957, 12, 450-452.—The illusion is the apparent convergence of the rays of the sun, which appears when the sun is obstructed behind hills or clouds. It is explained primarily on the basis of perspective. Psychological factors operate merely to locate the apparent distance of the sun just at the distance of the hill.—*T. Shipley.*

3700. Reinhold, D. B. Effect of training on perception of afterimages. *Percept. Mot. Skills*, 1957, 7, 198.—Comparison of mean response time on the first, sixth, and eleventh trials with that on the sixteenth, or testing trial yielded significant differences for the first trial (.001 level) and for the sixth trial (.01 level) but not for the eleventh trial. It was concluded that practice does affect perception of afterimages. Ss' reports indicated that there were consistent individual differences in response time and in color of the perceived afterimages.—*C. H. Ammons.*

3701. Roehrig, William Cruden. The influence of area and portion of the retina stimulated on the critical flicker-fusion threshold. *Dissertation Abstr.*, 1957, 17, 1820.—Abstract.

3702. Riggs, Lorrin A. Vision. *Annu. Rev. Psychol.*, 1958, 9, 19-46.—This review for the year ending April 1957 emphasizes the psychophysical and physiological approaches to vision. 181-item bibliography.—*A. J. Sprov.*

3703. Ronchi, L. Sull' influenze della "forma" dello stimolo luminoso sull' elettroretinogramma umano. (On the influence of the shape of the light stimulus on the human electroretinogram.) *Atti. Fond. Ronchi*, 1957, 12, 361-371.—The scotopic b-wave was studied as a function of various stimulus shapes, square waves, peak flashes, and gradually rising waves. It was invariant with all but the various gradually rising stimuli. The peak of the b-wave was delayed according to the gradualness of the rise.—*T. Shipley.*

3704. Ronchi, L., & Bittini, M. On the integrative properties of the dark adapted retina: Electroretinographic investigation. *Atti. Fond. Ronchi*, 1957, 12, 477-485.—With blue-violet stimuli, at mean

luminances, the dark-adapted retina is found able to integrate all the energy received within the latency time of the b-wave. This was not true of green or white.—*T. Shipley.*

3705. Ronchi, V. "Ciò che si vede" coincide con "cio che c'è"? (Does what we see correspond with what is?) *Atti. Fond. Ronchi*, 1957, 12, 350-360.—We always tend to underestimate distances. We see 'effigies,' not the true realities. Certain illusions are discussed within this framework.—*T. Shipley.*

3706. Shoaf, Frank Robert. Extra-foveal discrimination changes as a function of binocular exposure training. *Dissertation Abstr.*, 1957, 17, 2073.—Abstract.

3707. Snide, John David. The effects of simultaneous and successive cortical lesions and post-operative pretraining upon pattern vision in the rat. *Dissertation Abstr.*, 1957, 17, 1609-1610.—Abstract.

3708. Snyder, Fred W., & Snyder, Charles W. Vision with spatial inversion: A follow-up study. *Psychol. Rec.*, 1957, 7, 20-31.—The 30-day inverted spatial vision condition which had been used in an earlier study was repeated with the same subject under similar conditions after a two year rest. The study was designed to determine what happens to the learning curves for those tasks which had been practiced two years earlier with inverted spatial vision. For the four visual-motor tasks "... each curve of time [to perform task] in the present experiment started lower and followed the trend of each comparable curve in the first experiment." It was concluded that "two years of normal visuo-motor reactions between experiments had only a slight and momentary negative transfer effect. ..." —*S. C. Ratner.*

3709. Stewart, Edward Charles Pereira. A quantitative study of the Gelb effect. *Dissertation Abstr.*, 1957, 17, 1809.—Abstract.

3710. Stott, Richard Lavon. Sexual conflict, perceptual vigilance and perceptual defense in visual perception. *Dissertation Abstr.*, 1957, 17, 1816-1817.—Abstract.

3711. Sutherland, N. S. Visual discrimination of orientation by octopus. *Brit. J. Psychol.*, 1957, 48, 55-71.—Experiments were conducted on the discrimination of orientation by octopuses. It was shown that discrimination of orientation was easy where the orientations to be discriminated fall in the vertical and horizontal directions. Various transfer and memory tests were carried out which confirm that the animals were discriminating orientation and not other properties of the figures.—*L. E. Thune.*

3712. Thornton, Peggie K. Visual perception among the people of Malaya. *Bull. Brit. psychol. Soc.*, 1957, 32 (Inset), 12-13.—Abstract.

3713. Valdman, M. M. Uslovnyy migatel'nyi refleks u koz. (Conditioned blink reflex in goats.) *Fiziol. Zh. SSSR.*, 1957, 43, 358-363.—Mechanism and method, utilized in conditioning the blink reflex in goats, are described. Results show that, since each animal has its own "type of nervous system," an individual approach must be employed if increase in milk productivity is to be ensured through thermal or other means.—*I. D. London.*

3714. Vier, W. Sättigung, Übersättigung und Ermüdung in ihrer Wirkung auf die optische Verschmelzungsfrequenz. (Satiation, supersatiation and fatigue in their effect on the optical fusion frequency.) *Z. Psychol.*, 1956, 159, 246-279.—Concurrent with other authors it was established that the optical frequency of fusion drops during strenuous mental tasks, the drop being relative to the degree of mental strain. In satiation experiments, carried out according to a method developed by Karsten, no change in fusion frequency could be observed. In the state of supersatiation, however, there was a marked drop in optical frequency of fusion. The greater the time interval between satiation and super-satiation experiments, the less the drop in fusion frequency during the latter experiment. In sharp situational conflicts which threaten the subject's social prestige, there was a sharp drop.—K. M. Newman.

3715. Wilbanks, William A. The measurement of color blindness. *USN Sch. Aviat. Med. Res. Rep.*, 1956, Monogr. Series, No. 2. iv, 44 p.—This monograph provides a reasonably non-technical introduction to the theoretical basis of tests of color blindness for persons who have had no formal training in color theory. The system of color specification accepted by the Optical Society of America, the CIE system, is described and classified in terms of this system. A number of tests of color blindness involving the use of printed colored plates are discussed and the limitations of these polychromatic tests examined. 16 references.

(See also Abstracts 3497, 3502, 3504, 3716, 3750, 4295, 4467, 4477)

AUDITION

3716. Ades, H. W., Graybiel, Ashton; Morrill, S. N., Tolhurst, G. C., & Niven, J. I. Nystagmus elicited by high intensity sound. *USN Sch. Aviat. Med. Res. Rep.*, 1957, Proj. No. NM 13 01 99, Sub. 2, Rep. No. 6. ii, 21 p.—In order to study some of the extra-auditory effects of loud noise deaf subjects are stimulated by high intensity sound, both pure tone of several frequencies (100-3,000 c.p.s.) and wide band noise. In those showing positive response to vestibular stimulation in one or more standard tests, nystagmus was a regular consequence when the noise was of a sufficiently high intensity. Dizziness and apparent movement in the visual field were in some cases regular concomitants of nystagmus, in others, less consistent.

3717. Aronson, Arnold Elvin. Latency and magnitude of the galvanic skin response as related to long and short auditory stimuli. *Dissertation Abstr.*, 1957, 17, 2069-2070.—Abstract.

3718. Ehrlich, Stéphane; Oléron, Geneviève, & Fraisse, Paul. La structuration tonale des rythmes. (Tonal structuration of rhythms.) *Année psychol.*, 1956, 56, 27-45.—The role of differences in height of certain notes in a tonal series and the intensive influence of these differences were studied. Beating responses are affected by height, as is tonal group perception.—G. Rubin-Rabson.

3719. Gol'dburt, S. N. Uslovnoreflektornye izmeneniia vzbudimosti v slukhovom analizatore cheloveka v svyazi s intensivnost'iu signal'nogo

razdrazheniia. (Conditioned-reflex changes of excitability in the auditory analyzer in man in connection with the intensity of a signaling [conditioned] stimulation.) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 214-223.—The auditory threshold was measured at various intervals (from 0.5 to 15 min.) after elicitation of a blink reflex conditioned to a tone of 1,000 cycles/sec. This tone lasted from 50 msec. to 8 sec. and preceded the air puff directed to the cornea by 50 to 130 msec. When a tone, lasting 80 msec. at 40-80 db above threshold, served as conditioned stimulus, the subsequent changes of auditory threshold were slight and transitory. When of duration from 1.5 to 8 sec. at the same intensity, the auditory threshold was distinctly lower. The maximal rise in sensitivity (for 15-20 db) was obtained when the conditioned sound stimulus was of threshold intensity and of sufficiently long duration (1-1.5 sec.). "Differentiated excitability" is seen as the "basis of selective conduction," which in its turn is viewed as the "starting point for the formation of a conditioned reflex."—I. D. London.

3720. Gunkel, Ralph D., & Bornschein, Hans. Automatic intensity control in testing dark adaptation. *A.M.A. Arch. Ophthalm.*, 1957, 57, 681-686.—Intensity of repeated flashes is increased automatically and recorded until perception occurs. The method is an adoption of Beke's audiometer control to a Goldmann-Weekers instrument. The authors claim more reliable dark adaption curves can be obtained than with a nonautomatic method.—S. Renshaw.

3721. Harris, J. Donald. Hearing. *Annu. Rev. Psychol.*, 1958, 9, 47-70.—Review to April 1957 with 180-item bibliography.—A. J. Sprow.

3722. Hoffman, Howard S. The detection of signals and their attributes. *USN Submar. med. Res. Lab. Rep.*, 1956, 15(6), (Rep. No. 277). iii, 6 p.—"A series of noise-like signals was presented against a background of noise. Listeners were required to detect these signals and to specify their separate attributes. One attribute (chopping) was produced by periodically interrupting the signal. The second attribute (modulation) consisted of a periodic change in signal bandwidth. A given signal was either chopped, modulated, chopped and modulated, or steady. It was found that though the four signals were equally detectable, the detectability of the separate attributes varied as a function of their nature and number. Listeners differed in the extent to which modulation detection was adversely affected by the presence of chopping. In all other respects, differences among listeners were small."—N. B. Gordon.

3723. O'Connor, J. D., Gerstman, L. J., Liberman, A. M., Delattre, P. C., & Cooper, F. S. Acoustic cues for the perception of initial (w, j, r, l) in English. *Word*, 1957, 13, 24-43.—This study utilized the sound spectrograph, the pattern playback device, and the presentation of synthesized speech sounds to phonetically-naïve subjects in order to elicit perceptual judgments. The distinctions between the four sounds studied here depend chiefly on the transitions of the 2nd and 3rd formants, but only r and l require the 3rd formant. They all have a "steady-state" onset which serves to distinguish them from clusters in which they are preceded by a stop. The effects of several other secondary variables are studied.—J. B. Carroll.

3724. Shevkhman, B. E., & Babkin, V. P. Zadachi spektral'nogo analiza sil'nykh zvukovykh razdrzhitel' v laboratornykh biologicheskikh eksperimentakh i v promyshlennyykh usloviyakh. (Tasks of spectral analysis of intense acoustic stimuli in laboratory biological experiments and under industrial conditions.) *Biofizika*, 1957, 2, 112-118.—When considering the action of a stimulus on the auditory function, one ought to view the acoustic spectrum with respect to its energy distribution over the frequency range under consideration. To do this, one should determine the frequency region in which the greater part of the energy of the spectrum is concentrated and also the nature of the variation of spectral density outside this range of frequencies. In view of the fact that many types of production have one-type noise-spectra, there is no necessity to reproduce in the laboratory the noise of an individual production process; it is sufficient to create stimuli with single-type spectra.—I. D. London.

3725. Teegarden, James Carr. Auditory threshold variations associated with stimulation by sustained vowels. *Dissertation Abstr.*, 1957, 17, 2088-2089.—Abstract.

3726. Voĭtinskii, E. IA. Issledovanie differentsial'noi chuvstvitel'nosti v usloviyakh "absolutnogo" razlicheniia riada zvukovykh signalov. (Study of differential sensitivity under conditions of "absolute" differentiation of a series of acoustic signals.) *Biofizika*, 1957, 2, 147-153.—Under conditions of "absolute" differentiation of 5 signals, the differentiation frequency thresholds are considerably higher than those found in traditional experiments of auditory physiology. An increase in the number of "absolutely" distinguishable signals probably leads to an increase in the magnitude of the differential thresholds. Although the amount of information obtained decreases when the frequencies of sound signals approach each other, the thresholds decrease and the frequency differentiation becomes finer. Training in the course of the experiments is a factor contributing to increasing the fineness of differentiation.—I. D. London.

3727. Whitfield, I. C. The electrical responses of the unanaesthetized auditory cortex in the intact cat. *EEG clin. Neurophysiol.*, 1957, 9, 35-42.—Electrical Rs of the unanesthetized auditory cortex in the intact cat differ from those in the anesthetized and "encéphale isolé" preparations. They show considerable variability, Rs to clicks being most stable. A cortical R which contains a component at the modulation frequency is obtained with frequency modulated stimuli. The data suggest that an extensive but sharply delimited area is activated by each tone and this area moves across the cortex as the stimulating frequency is changed.—R. J. Ellingson.

(See also Abstracts 3619, 4487)

RESPONSE PROCESSES

3728. Akimoto, Haruo; Yamaguchi, Nariyoshi; Okabe, Ken-ichirō; Nakagawa, Tsutomu; Nakamura, Itsuaki; Abe, Kan-ichi; Torii, Hosaku, & Masahashi, Koji. On the sleep induced through electrical stimulation on dog thalamus. *Folia psychiat. neur. jap.*, 1956, 10, 117-146.—In 47 dogs with

chronic cortical and subcortical electrode implants sleep was induced by repetitive low voltage, low frequency stimulation of the thalamic system. Simultaneous cortical and subcortical EEG during induced sleep was compared with EEG obtained during normal sleep and under barbiturate narcosis. Observed behavior and EEG during thalamically induced sleep are essentially like those of normal sleep, but different from those under barbiturate narcosis. When thalamic stimulation of high frequency is applied in the sleeping animal, the dog wakes and the EEG shows typical arousal patterns. The authors conclude that induced thalamic sleep is essentially an induced form of normal sleep, and that both consist of a synchronization of diffuse cortical and subcortical activity. 35 references.—M. L. Simmel.

3729. Ammons, R. B., & Ammons, C. H. Motor skills bibliography: XVII. Psychological Abstracts, 1947, Volume 21. *Percept. Mot. Skills*, 1957, 7, 41-44.—99 items refer to research studies on a wide range of perceptual and motor skills. This is part of a continuing series.—J. Coulson.

3730. Ammons, R. B., & Ammons, C. H. Motor skills bibliography: XIX. Psychological Abstracts, 1949, Volume 23. *Percept. Mot. Skills*, 1957, 7, 231-234.—In Volume 23 of *Psychological Abstracts* are 94 references to studies of skilled behavior. These are listed alphabetically by author rather than by topic.—J. L. Coulson.

3731. Anliker, James, & Mayer, Jean. The regulation of food intake: Some experiments relating behavioral, metabolic and morphologic aspects. *Amer. J. clin. Nutr.*, 1957, 5, 148-153.—A behavioral method (record of lever pressing, rewarded at fixed frequencies with pellets of food) served to bring out large differences in the feeding rates of hyperphagic (gold-thioglucose obese, hypothalamic obese, hereditary obese) and normal mice. The relations between hypothalamic structures, with a "feeding" and "satiety" center, and the feeding-fasting behavior are considered in the light of available experimental evidence. It is postulated that the satiety center obtains information from the blood stream via glucoreceptors. The destruction of the satiety center releases the feeding center from inhibitory influences and results in hyperphagia.—J. Brožek.

3732. Asmonas, V. Role of instinctive preferences in the discovery of new and effective leads for cancer control. *Psychol. Rep.*, 1957, 3, 365-371.—A brief review of some observations and experimental data on instinctive or self-selection of foods by animal and human Ss suggests that a research program, which investigated these behaviors experimentally, might permit the development of treatment for cancer and control of the disease.—C. H. Ammons.

3733. Bass, Bernard M. Iterative inverse factor analysis—a rapid method for clustering persons. *Psychometrika*, 1957, 22, 105-107.—"By interchanging persons and items, iterative inverse factor analysis provides a relatively inexpensive way of clustering persons according to their patterns of response to the items. In addition to permitting the clustering of large numbers of persons, the technique enables one to determine the bases for such clustering. The items of behavior used can be heterogeneous in content and form."—M. O. Wilson.

3734. Broadhurst, P. L. Air deprivation as a motivational technique in the rat, and its application to the problem of emotionality as a determinant of drive. *Bull. Brit. psychol. Soc.*, 1957, 32 (Inset), 23.—Abstract.

3735. Broadhurst, P. L. Determinants of emotionality in the rat: I. Situational factors. *Brit. J. Psychol.*, 1957, 48, 1-12.—"An experiment was designed to establish the optimum conditions for using Hall's open-field test of emotionality in the white rat. A large ($N=192$) factorial design permitted simultaneous evaluation of the following components of the test which were thought to be productive of emotional responses: size of test area, intensity of illumination and intensity of sound." "The results . . . show that females defecate significantly less than males and ambulate more, that noise is a potent factor in evoking emotional elimination and light less so. Arena size does not affect defecation, but rats run further in a larger arena. Pre-trial shock reduces defecation, whereas food deprivation has no significant effect. Interactions are few, and mostly concern sex differences in response." 40 references.—L. E. Thune.

3736. Brown, F. A., Bennett, M. F., Webb, H. M., & Ralph, C. L. Persistent daily, monthly, and 27-day cycles of activity in the oyster and quahog. *J. exp. Zool.*, 1956, 131, 235-262.—The activity of oysters and quahogs were studied by direct mechanical connections between the upper valves of the molluscs and an ink writer system. Several cycles were apparent: daily cycles which appear to depend upon mean cycles of barometric pressure; a monthly variation in the form of the daily cycle and a 27-day cycle that is attributed to changes in the pattern of cosmic radiation during the 27-day period of the rotation of the sun on its axis.—R. T. Davis.

3737. Brožek, Josef. Nutrition and behavior: An epilogue. *Amer. J. clin. Nutr.*, 1957, 5, 332-341.—A survey of current trends and selected recent publications, prepared as supplement to a symposium on nutrition and behavior. Considers clinical and field investigations; experimental studies on human and animal behavior, their methodology and results; hunger, appetite, and satiety; obesity and weight reduction; and food flavor and acceptability. The survey ends with "a look into the crystal ball," with emphasis on some of the pressing research topics (chemical composition and sensory effects of foods, adaptation to undernutrition and appraisal of the effects of improved nutrition, regulation of body weight, food habits crucial for determining fat intake).—J. Brožek.

3738. Brožek, Josef. (Ed.) Symposium on nutrition and behavior: Proceedings of a symposium held at the University of Minnesota, School of Public Health, Laboratory of Physiological Hygiene, Minneapolis, Minnesota, April 27, 1956. New York: National Vitamin Foundation, 1957. 124 p. \$2.50.—16 papers grouped into four sections: Impact of diet on behavior, Hunger and appetite, Food appraisal and acceptance by man, Satiety and weight control, were reprinted from the American Journal of Clinical Nutrition. R. B. MacLeod, C. P. Richter, W. F. Dove, and J. Mayer served as section chairmen. The editor contributed the foreword

and the epilogue surveying current trends and selected recent publications in this field.—J. Brožek.

3739. Brožek, Josef, & Guetzkow, Harold. Psychologic effects of thiamine restriction and deprivation in normal young men. *Amer. J. clin. Nutr.*, 1957, 5, 109-118.—The study, carried out in an interdisciplinary framework of investigations on the impact of dietary variations on man's "fitness," contributes to our information on the thiamine requirements of normal young men. More importantly, it provides a comprehensive characterization of the changes, some of them profound, in sensory and intellectual functions, motor performance and personality, associated with maintenance on a thiamine-free diet. The effects of supplementation of the diet with synthetic thiamine were dramatic both in the speed and degree of recovery.—J. Brožek.

3740. Chauvin, Rémy. L'animal en tant que constructeur. (Animals as construction workers.) *J. Psychol. norm. path.*, 1956, 53, 487-501.—The author reviews observations on nestbuilding in birds, spiders, wasps, bees, termites and ants. Nestbuilding activity is not a stereotype inflexible reflex regulated behavior. Rather, it shows great plasticity which varies somewhat with the species and with the stage of completion of the nest. Reaction of the nest-builders to outside interference and partial destruction are studied in detail. 22 references.—M. L. Simmel.

3741. Christian, P. Möglichkeiten und Grenzen einer naturwissenschaftlichen Betrachtung der menschlichen Bewegung. (Possibilities and limits of a natural science view of human movement.) *Jb. Psychol. Psychother.*, 1956, 4, 346-356.—Cybernetic models can be used to study problems of human movement like: range of variation within which a particular movement can be executed, how a qualitative shift in form of movement occurs as a function of quantitative increase in speed of movement, and how continuous critical control of movement ensures an integrated outcome. Such models, because of their assumption of directedness, are useful for the study of biological activities, which they mimic in a limited but useful manner.—E. W. Eng.

3742. Callieri, Bruno, & Di Biagio, Franco. Meccanismi e ritmi ripetitivi in psicologia e in psichiatria. (Repetitive mechanisms and rhythms in psychology and psychiatry.) *Arch. Psicol. Neur. Psich.*, 1957, 18, 107-124.—Repetitive phenomena in psychological functioning and in psychopathology are discussed in relation to the possibility of underlying repetitive physiological and neurological mechanisms. The relation of such repetitions to Jaensch's and Gross' theories, to libidinal theory, and to defense mechanisms, is analyzed. English, French and German summaries. 23 references.—E. Rosen.

3743. Fields, Paul E., & Murray, A. Keith. The response of young silver salmon to a light barrier after three levels of light adaptation. *Univer. Wash. Sch. Fish. Tech. Rep.*, 1956, No. 27, 1-9.—16 groups of 25 yearling *Oncorhynchus kisutch* were tested for guidance in an experimental flume with 2 f.p.s. velocity under four combinations of light adaptation and barrier illumination. Five minutes of adaptation to an 8 ft. cdl. level outside the flume significantly increased the guiding effectiveness of the 8 ft. cdl. light barrier in the otherwise darkened flume

5 seconds later and was accompanied by the longest swimming times. Adaptation to 100 ft. cdl. destroyed the guiding effectiveness of the 8 ft. cdl. light barrier and greatly reduced the swimming time. Any light in the flume significantly increased the swimming time over that obtained in the dark.—P. E. Fields.

3744. Gliszczynska, Xymena. Wplyw zmiany stosunków czasowych na reakcje ruchowe. (The influence of the change of temporal relations in a stereotype on motor reactions.) *Studia psychol.*, 1956, 1, 176-188.—It has been found in the experimental investigation with the Ivanov-Smolenski apparatus that changes of temporal relations in a recently formed motor stereotype consisting in the shortening or lengthening of pauses between stimuli, cause disturbances in the stereotypical nervous activity. The author suggests several possible explanations of this fact in terms of the dynamics of higher nervous activity and proposes some modifications in future experimental work which can possibly give answer to still unsolved aspects of the problem.—M. Chojnowski.

3745. Griffiths, W. J., Jr., & Griffiths, M. T. Effect of oral administration of reserpine on the incidence of audio-fits, activity, and variability behavior in white rats. *Psychol. Rep.*, 1957, 3, 259-264.—40 male rats served as Ss in an experiment designed to determine the effects of reserpine on susceptibility to sound-induced convulsions, activity levels, and variability of responses. It was found that the drug was effective in reducing the seizures among animals ordinarily showing convulsions when stimulated auditorially; it reduced activity levels as measured by the activity wheel and checkerboard devices; and it increased behavior variability on the latter apparatus. Significance of findings was discussed relative to the nature of sound-induced seizures.—C. H. Ammons.

3746. Hess, Grethe, & Jacobsen, Erik. The influence of Benactyzine on reaction time. *Acta pharm. tox., Kbh.*, 1957, 13, 135-141.—Discriminative reaction time to a bell or buzzer stimulus was measured for 11 subjects under control conditions and after subcutaneous injection of 5 to 6 mg. of Benactyzine. Reaction time to one of the 2 stimuli increased significantly under the drug, and the number of errors generally increased.—G. A. Heise.

3747. Il'ianok, V. A. O vliianii osveshchennosti na vyrobotku slozhnykh dvigatel'nykh reaktsii. (On the influence of illumination on the development of complex motor reactions.) *Biofizika*, 1957, 2, 234-241.—The speed with which complex motor reactions are formed is to a great extent a direct function of intensity of illumination. The over-all duration of motor reactions and the duration of movements, given an equal number of repetitions, are substantially greater in the case of poor illumination, especially where more precise movements were required; the number of movements required in the solution of one and the same task likewise increased considerably in the case of poor illumination.—I. D. London.

3748. Jaeger, Martha. Some aspects of relationship between motor coordination and personality in a group of college women. *Dissertation Abstr.*, 1957, 17, 2065.—Abstract.

3749. James, W. T., & Gilbert, T. F. Elimination of eating behavior by food injection in weaned puppies. *Psychol. Rep.*, 1957, 3, 167-168.—An attempt was made to determine if food, injected into the stomach as puppies shifted from sucking to eating, would eliminate the eating response. In experimental tests the stomach was filled with food, and S was given an opportunity for further eating from a pan. In control tests Ss were fed until they refused food; then after a short time they were presented with food again. It was found that food injected into the stomach during this period usually eliminated further eating which supports a theory of stomach distention as controlling eating.—C. H. Ammons.

3750. Kaplan, M. Amplitude of respiratory movements as a function of noxious stimulus intensity. *Psychol. Rep.*, 1957, 3, 429-438.—The eliciting effects of noxious light upon amplitude of respiratory movements were examined in the albino rat at 0.5-min. durations under 6 different intensities. Variation in amplitude change tended to be greater in the OFF- than in the ON-response distributions and appeared to be an increasing function of aversive light intensity for both measures, although only the OFF-response function was found to be statistically reliable. The predominant ON-response represents an increase in amplitude, and the predominant OFF-response appears to represent a decrease in amplitude below pre-stimulation levels.—C. H. Ammons.

3751. Kottenhoff, H., Lindahl, L. E. H., & Mable, S. E. R. Optical and mechanical devices for testing susceptibility to motion sickness. *Percept. Mot. Skills*, 1957, 7, 221-222.—Several devices now being used for testing susceptibility to motion sickness are described: spectacles which reverse the visual field contents and their motion, a revolving chair which may be rocked while S wears prismatic spectacles, and a pneumatic rubber dinghy in a tank of water. Cables and pulleys control movement of the dinghy.—C. H. Ammons.

3752. Kummer, Hans. Soziales Verhalten einer Mantelpavian-Gruppe. (Social behavior of a group of hamadryad baboons.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1957, Suppl. No. 33, 1-91.—In this paper are presented only the social behavior elements of mother-child relations, fear and threat. The young animal is free from the strict rules governing adult relations and he enters only gradually into the field of social tensions. When frightened, the young seek protection in the arms or on the back of their mother. The place of the mother is at first taken by the oldest mature male and later more and more by the highest ranking old male. Threatening behavior against one individual induces others nearby to engage in similar threatening behavior. However, this induced threatening behavior often turns against a different object, mainly low ranking females. English and German summaries.—J. W. House.

3753. Montgomery, K. C., & Zimbardo, P. G. Effect of sensory and behavioral deprivation upon exploratory behavior in the rat. *Percept. Mot. Skills*, 1957, 7, 223-229.—72 rats were divided into 3 groups of 24. After weaning, one group was reared in normal cages, another in small behavioral-deprivation cages, and the third in small behavioral- and sensory-deprivation cages. Subgroups remained in the rearing conditions for 25, 50 or 100 days. Ss

were given 4 exploratory-behavior trials in a standard Y-maze. Amount and orderliness of exploratory behavior and of emotionality were measured. No differences were observed among groups. Findings support the position that exploratory behavior is dependent upon exteroceptive stimulation, and not motivated by drives of boredom or need for exercise, or acquired drives based upon hunger.—C. H. Ammons.

3754. Norkina, L. N. *Dinamika protsessy differentsirovaniia dvigatel'nykh uslovnykh refleksov.* (Dynamics of the process of differentiating conditioned motor reflexes.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 710-717.—A study was undertaken to trace the process of differentiating two movements, akin in form, but opposite in direction, in baboons. In the first conditioned responses one or another movement was dominant; if not reinforced, a rapid change-over from one movement to another occurred as well as their frequent repetition. A gradual extinction of "motor distortions" and repetitive movements with growing differentiation was observed. It is concluded that "in the first period of differentiation the motor analyzer is characterized by inert nervous processes" and that the "differentiation of motor conditioned reflexes proceeds on the basis of development of mutual inductive relations, intensified concentration and lability of nervous processes at the corresponding points of the motor analyzer."—I. D. London.

3755. Oléron, Geneviève. *Influence de la répétition sur la structuration temporelle des mouvements d'accompagnement de la musique.* (Influence of repetition on the temporal structuration of movements to music.) *Année psychol.*, 1956, 56, 13-26.—During the course of musical repetitions, hand movements increase as audio-motor adjustment increases. The actual number depends on the music and the individual. Repetitions tend to diminish the differences in subjects in quantity if not in quality of movement. A passive attitude favors a cadenced movement.—G. Rubin-Rabson.

3756. Richard, Gaston. *Contribution à l'étude du géotropisme de "calotermes flavicollis fab."* (A contribution to the study of geotropism in the termite.) *J. Psychol. norm. Path.*, 1956, 53, 502-527.—The author, by means of specially constructed observation and recording apparatus, studied the development of geotropism and phototropism through the several metamorphic stages. Both tropisms are acquired prior to the final adult stage but, while light sensitivity appears in the course of larval development, geotropic sensitivity is established only with the approach of the final stage. Various characteristics of geotropism and phototropism are compared. 21 references.—M. L. Simmel.

3757. Richter, Curt P., & Rice, Katherine K. *Experimental production in rats of abnormal cycles in behavior and metabolism.* *J. nerv. ment. Dis.*, 1956, 124, 393-395.—Observations made on thyroidectomized rats which showed abnormal cycles of activity and metabolism are related to similar observations of cyclical activity in schizophrenic patients as reported by Gjessing and others.—N. H. Pronko.

3758. Schnierla, T. C. *Theoretical considerations of cyclic processes in doryline ants.* *Proc.*

Amer. phil. Soc., 1957, 101, 106-133.—The behavior of army ants (*Eciton*, 2 species), carnivorous and predatory, passes regularly through a cycle of 2 stages, a statary (fixed nest) and a nomadic, of about 3 and 2 weeks respectively. The cycle is symbiotically controlled within the colony. The larvae emerging from the cocoons and also the young callow workers excite the old workers by smell and taste, as the older workers handle them, to a steadily increasing excitement and activity, which presently result in great raids and accumulation of food and then to the migration of the whole colony. At one stage excess of accumulating food with which the queen is plied induces ovulation and thus keeps reproduction of new larvae in phase with the cycle. Changes of temperature, moisture, and light also affect the behavior. A comparison is made with other doryline species.—E. G. Boring.

3759. Siegel, P. S. *The completion compulsion in human eating.* *Psychol. Rep.*, 1957, 3, 15-16.—Food intake habits of 23 Ss were recorded during a 3-week period. Ss showed a marked tendency to eat all of the served portion.—C. H. Ammons.

3760. Siegel, Paul S. *The repetitive element in the diet.* *Amer. J. clin. Nutr.*, 1957, 5, 162-164.—Appraisal of a diet as monotonous is positively related to the number of times a food item has been ingested, to its initial acceptance level, and to certain personality characteristics of the consumers. Behaviorally, monotony of a diet is expressed in rating scale changes, in an increase in the amount of uneaten food, and, in extreme cases, in the refusal to eat. Items comprising a repetitive diet may differ in the rate of decline in palatability ratings with time. In considering the broader problem of regulation of food intake, the factors accounting for the cessation of eating deserve increased attention.—J. Brožek.

3761. Talmadge, Max. *A study of expressive graphic motor movements and their relationship to temperament factors.* *Dissertation Abstr.*, 1957, 17, 2073-2074.—Abstract.

3762. Teichner, Warren H. *Effects of foreperiod, induced muscular tension, and stimulus regularity on simple reaction time.* *J. exp. Psychol.*, 1957, 53, 277-284.—Found that foreperiod length and muscular tension are independent in their effects on reaction time (RT). In general, RT varies inversely with magnitude of muscular tension. There appears to be an optimum foreperiod of reaction which, in the present massed practice task, was 5-6 sec. No practice effects due to the repeated elicitation of the reaction were found.—J. Arbit.

3763. Traxel, Werner, & Becher, Siegfried. *Beiträge zur Messmethodik und Interpretation von Hautwiderstandsveränderungen.* (Contributions to measurement techniques and interpretation of changes in skin resistance.) *Z. Psychol.*, 1957, 160, 282-301.—A direct registering apparatus for changes in the skin resistance was developed. A high correlation was found between the size and duration of resistance changes and the judgment of the subjects as to the intensity of affects. It seems also as if there were a definite relationship between changes in skin resistance and affect intensity.—K. M. Newman.

3764. Verplanck, William S. *Comparative psychology.* *Annu. Rev. Psychol.*, 1958, 9, 99-118.—A review based on visits to laboratories and field sta-

tions and a survey of the year's (to May 1957) publications in the psychological, ethological, and biological journals. 98-item bibliography.—*A. J. Sprov.*

3765. Voigt, Johannes. Über individuelle Varietäten der Ermüdung. (Individual varieties of fatigue.) *Z. exp. angewand. Psychol.*, 1956, 4, 274-306.—Performances at the beginning and the end of a 3-hour session of adding one digit numbers yielded some measures of fatigue. In addition 2 parallel forms of Sander's interpretation test during actual genesis were administered before and after the fatigue situation. The differences in response to these tests were taken as additional measures of fatigue. Part of the obtained measures of fatigue was attributed to "central" factors, the rest to "peripheral" factors. The ratio central over peripheral factors is called the fatigue quotient. The subjects, separated into 3 groups according to typological classification, showed characteristic differences in the fatigue quotient. English and French summaries.—*W. J. Koppitz.*

3766. Weiss, Bernard. Pantothenic acid deprivation and thermal behavior of the rat. *Amer. J. clin. Nutr.*, 1957, 5, 125-128.—Rats maintained in an ambient temperature of 0° C. learned to activate a heat lamp by pressing a lever. When placed on pantothenic-acid deficient diet and subsequently submitted to starvation, they were more sensitive to cold than animals deprived only of food, as indicated by a marked increase in the rate of lever pressing.—*J. Brožek.*

3767. Winn, Howard E., & Bardach, John E. Behavior, sexual dichromatism, and species of parrot fishes. *Science*, 1957, 125, 885-886.—"Our methods of determining which male and female belonged together were (i) observation of the spawning aggregations and other associations of the color forms recognized, (ii) injection of testosterone into females of certain color pattern, followed by observation of the resultant male color pattern, and (iii) comparison of morphologic characteristics." Results "demonstrate the occurrence of sexual dimorphism in coral reef fishes and especially in the family Scaridae, which has been considered not to be sexually dimorphic, in general."—*S. J. Lachman.*

3768. Young, D. R., & Spector, Harry. Physical performance capacity and nutriture: Evaluation of rations by animal experimentation. *Amer. J. clin. Nutr.*, 1957, 5, 129-140.—A critical review of methods for the measurement of physical performance capacity in man and animals. Literature on diet and performance is summarized in tabular form, and the concrete problem of assessing nutritional adequacy of military rations by studying performance in animals is examined. 136 references.—*J. Brožek.*

3769. Young, Paul Thomas. Psychological factors regulating the feeding process. *Amer. J. clin. Nutr.*, 1957, 5, 154-161.—An appetite (specific hunger) is defined in behavioral terms as an acquired determination to seek out and select a particular nutrient. In addition to complex physiological regulators, including the chemical state of the organism as determined by its constitution and dietary history, food intake depends upon the palatability of the foods, the affective arousal that follows the ingestion of certain foods or their absence in the

diet, and existing habits and attitudes. A combination of a chemical and a psychological approach is considered a prerequisite for an adequate analysis of patterns of food preferences and addictions.—*J. Brožek.*

3770. Welker, W. I. "Free" versus "forced" exploration of a novel situation by rats. *Psychol. Rep.*, 1957, 3, 95-108.—On the basis of extensive analysis of observational and cinema records of rat behavior, the author concludes that: (1) exploratory behavior may serve to avoid a novel situation as well as to approach it; and (2) unless the animal is allowed to make this choice, it cannot be ascertained which variety of exploration is being exhibited.—*C. H. Ammons.*

3771. Zaleski, IU. M. Nabliudeniia nad poletom zhukov-prionov i podenok. (Observations on the flight of prionus beetles and mayflies.) *Biofizika*, 1957, 2, 369-375.—Observations, made on the flight of mayflies and prionus beetles, allow the following conclusions: (1) the elytra of certain beetles ensure lateral stability of the body in flight; (2) of importance to prionus beetles in flight is the integrity of their tarsi, covered with tiny hairs, which are probably used by beetles to feel the oncoming flow of air, just as the desert locust does through the sense hairs on its head; (3) the parachuting flight of mayflies, oriented against the wind, is not simple parachuting, but a more complex process, making use of the reactive aerodynamic forces that are created as a result of the wings and caudal filaments being passed over by the flow of air. These forces reduce the frontal resistance of the wind. The hovering of the insect in the air stimulates its flight due to arousal of the "tarsal reflex."—*I. D. London.*

(See also Abstract 3881)

COMPLEX PROCESSES & ORGANIZATIONS

3772. Asch, Morton Jay. Negative response bias and personality adjustment. *Dissertation Abstr.*, 1957, 17, 1704.—Abstract.

3773. Bakan, P., & Kleba, F. Reliability of time estimates. *Percept. Mot. Skills*, 1957, 7, 23-24.—55 Ss made verbal estimates of 5 intervals ranging from 15 sec. to 240 sec. There were 2 sessions, one week apart, and in each session there were 2 identical series of time intervals. Reliability coefficients were generally low. Reliability coefficients for estimates made in the same session were greater than for those made a week apart. The week-later coefficients between estimates from the second series on each day were greater than those from the first series of each day.—*C. H. Ammons.*

3774. Barnett, S. A. The 'expression of the emotions.' *New Biol.*, 1957, No. 22, 73-90.—There is a need for a refinement of the method used by Darwin in his study of the "expression of the emotions." In order to be complete, such an approach must take in both behavior and physiology. The study of bodily changes in normal as well as in abnormal and thwarted states points to a source of energy which must have an outlet. We may now have the methods that will "enable us to translate these vague concepts into a real science of animal and human behavior." 16 references.—*N. H. Pronko.*

3775. Buchenholz, Bruce. The motivating action of pleasure. *J. nerv. ment. Dis.*, 1956, 124, 569-577.—A large number of people in the following age groups was asked to write a detailed description of what pleasure feels like; ages 18-25, 40-65, 14-16 and a non-volunteer group between 18 and 25 years. It was found in all groups that part of the subjective experience of pleasure consists of action impulses varying in clarity and definition. 4 types of these impulses are described and discussed.—N. H. Pronko.

3776. Cohen, Haskel. The effect of oral need on cognitive responses of children. *Dissertation Abstr.*, 1957, 17, 1592.—Abstract.

3777. Cohen, Sanford I., Silverman, Albert J., & Burch, Neil R. A technique for the assessment of affect change. *J. nerv. ment. Dis.*, 1956, 124, 352-360.—5 subjects were used in a study designed to test sensitivity to skin resistance variations to changes in affective responses to various words. Increase in the arousal level of the subjects with stimulants, epinephrine or emotional stimuli was accompanied by a decrease in the amplitude of specific responses. Other relationships are brought out and these and the possible uses of this instrument in research and clinical psychiatry are discussed. 15 references.—N. H. Pronko.

3778. Conklin, Jack E. Effect of control lag on performance in a tracking task. *J. exp. Psychol.*, 1957, 53, 261-268.—The experiment is concerned with the effect of delay between the control and display on tracking activity. Lag was introduced by 2 different filter networks. Used pursuit and compensatory display, 4 different target courses, and 5 delay intervals. "The results support the assumption that predictive behavior on the part of S is essential for skilled performance. Experimental task variables that impair short-term predictions about future target position seriously limit tracking efficiency."—J. Arbit.

3779. Costa, Louis David. Test anxiety, self-acceptance, and task performance in an induced failure situation. *Dissertation Abstr.*, 1957, 17, 1593.—Abstract.

3780. Daston, P. G. Perception of idiosyncratically familiar words. *Percept. Mot. Skills*, 1957, 7, 3-6.—The present study investigated the effect of idiosyncratic familiarity upon time required for correct verbal identification of words presented tachistoscopically. 20 Ss in psychotherapy were presented with words they used often in therapy interviews and control words matched for frequency of general usage and length. There were 130 words in each group. Statistical analyses indicated relative differences in recognition times favoring words idiosyncratically familiar. Findings were discussed relative to limitations of frequency-of-usage tables.—C. H. Ammons.

3781. Eilbert, Leo R. A tentative definition of emotional immaturity utilizing the critical incident technique. *Personn. Guid. J.*, 1957, 35, 554-563.—A total of 621 specific incidents of behavior judged to be immature reactions to situations were obtained from psychiatrists, psychologists and others; and classified into 51 categories and 7 major areas. The classification was then submitted to a panel of 14 psychiatrists for acceptance or rejection. All of the categories were accepted by at least half of the psychiatrists. It is concluded that this study pro-

vides a tentative definition of emotionally immature reactions to situations.—G. S. Speer.

3782. Feldman, A. Bronson. Symbolism genuine and artificial (Illustrated in a story by Andreyev). *Samikša*, 1956, 10, 167-174.—Conscious or artificial symbolism (emblemism) seeks objects to represent abstract ideas, e.g., the flag. Genuine symbolism springs from the unconscious mind and selects things to represent forces or relations which are always concrete and which are savagely repressed by the super-ego. A master workman in symbolism whose writings have suffered an undeserved eclipse is Leonid Andreyev (1871-1919). His story "The Abyss" is a textual gem in psychoanalytic learning. Analysis of the genuine symbolism in the individual psychology of characteristic Russian fiction throws light on the unconscious of the entire Russian nationality and its influence in history.—D. Prager.

3783. Geier, Carol Jane. Word association responses in relation to reading ability. *Dissertation Abstr.*, 1957, 17, 2063-2064.—Abstract.

3784. Hall, John F., & Ugelow, Alvin. Free association time as a function of word frequency. *Canad. J. Psychol.*, 1957, 11, 29-32.—To determine the relationship between stimulus word frequency (Thorndike-Lorge count) and free association time, associations to 24 low frequency and 24 high frequency 5-letter words were timed and recorded. The mean time was significantly lower for high frequency words, and they tended to elicit fewer different responses.—R. Davidson.

3785. Hauty, G. T., & Payne, R. B. Effects of dextroamphetamine upon judgment. *J. Pharmacol.*, 1957, 120, 33-37.—d-Amphetamine sulfate (5 mgm.), and scopolamine (0.65 mgm.) plus diphenhydramine hydrochloride (50 mgm.) did not affect performance on a mirror vision task. These drugs also did not significantly influence the subjects' estimates of their proficiency scores on the next test trial, "... despite the imposition of experimental conditions designed to elicit or augment whatever adverse effects may be inherent in these pharmacological preparations."—G. A. Heise.

3786. Kamin, Leon J. The measurement of anxiety: A methodological note. *Canad. J. Psychol.*, 1957, 11, 71-74.—To control other variables which may influence task performance apart from level of anxiety, it is suggested that a selected task be given under threat and non-threat conditions. The difference or ratio score may be attributed to anxiety, and may be used to explore whether there are different types of anxiety specific to different kinds of threat.—R. Davidson.

3787. Kristofferson, A. B. Word recognition, meaningfulness, and familiarity. *Percept. Mot. Skills*, 1957, 7, 219-220.—Recognition thresholds for words selected over the entire range of meaningfulness (m) values were measured by the ascending method of limits in a Gerbrands tachistoscope. It can be concluded that threshold (T) is inversely related to m and familiarity (f), Kendall's coefficient of rank correlation being $-.56$ for m and $-.61$ for f, both significant at beyond the 1% level of confidence. These data indicate that a large part of the variance in visual recognition may be accounted for in terms of response measures unlike operations involved in

measurement of recognition thresholds.—C. H. Ammons.

3788. Laskowitz, David. A review of the conceptual status of anxiety. *Psychol. Rev.*, 1957, 7, 3-20.—Theoretical and methodological differences among various conceptions of anxiety are examined. Consensus is found in the differentiations that are made between anxiety and fear. The use of the Freudian concept of anxiety as an intervening variable in S-R type formulations and the use in motivation theory are discussed from a methodological point of view. Experimental results from these two formulations are cited. Lastly, the writer considers the question of the function of anxiety as a constructive and destructive force. 42 references.—S. C. Ratner.

3789. Newton, G., Paul, J., & Bovard, E. W., Jr. Effect of emotional stress on finger temperature. *Psychol. Rep.*, 1957, 3, 341-343.—Two groups of student nurses (14 Ss) were employed in an investigation of the effect of emotional stress on finger temperature. The group receiving emotionally negative treatment showed a mean fall in finger temperature significantly greater than that elicited in Ss introduced to a positive situation. No appreciable difference in inter-group basal temperature means appeared.—C. H. Ammons.

3790. Niederland, William G. River symbolism: Part II. *Psychoanal. Quart.*, 1957, 26, 50-75.—A number of medieval maps and writings dated between 500 and 1500 A.D. were analyzed and interpreted as pictorial, descriptive aggregates of oedipal and preoedipal fantasies projected on areas of the world which, if still unknown today, would presumably appear as blanks on our maps. These considerations are presented in support of Freud's association of thirst for knowledge with sexual curiosity.—74-item bibliography.—L. N. Solomon.

3791. Ruyer, Raymond. La nutrition et l'intoxication psychiques. (Psychic nourishment and intoxication.) *J. Psychol. norm. Path.*, 1956, 53, 528-539.—The author distinguishes 3 types of nourishment essential for human survival: physiological nourishment through the consumption of material foods; mental nourishment through conscious cognitive activity; and psychic nourishment through expressive, emotional, instinctive and social activities. The need for psychic nourishment and its satisfaction are illustrated in many kinds of typical human behavior.—M. L. Simmel.

3792. Uematsu, Sakae. Yōkyū suijyun to saikō dōsa. (Level of aspiration and resumption of interrupted tasks.) *Jap. J. educ. Psychol.*, 1956, 3, 221-227.—The dynamic mechanism of goal setting behavior was studied in relation to resumption of arithmetic test and personality characteristics with 7th grade children. The result was in support of the hypothesis that those who have high motivation but are frustrated by their failure, tend to set unrealistic goals and to resume their tasks, because the tension is not released. The Ss with positive goal discrepancy scores were more extraverted, intelligent and had more neurotic tendency than the negative and unstable goal setters. English summary, p. 246.—S. Ohwaki.

3793. v. Dittfurth, Hoimar. Die affektiv-vegetative Kommunikation. (Versuch einer psychosomatischen Theorie der vitalen Stimmung.) (Af-

fective-vegetative communication. (An attempt to formulate a psychosomatic theory of "vital mood.") *Nervenarzt*, 1957, 28, 103-107.—The author speculates on feelings and affect as experience of "vegetative communication." Man's freedom of action is limited by the basic needs of his body which find expression as "vital mood." Man is able to control his "vegetative moods" unless he is overwhelmed by them like an animal. This "mood" is a lower and indirect communication with the world through the medium of the body. Higher and more direct ways of such communication would be the aesthetic or the rational ones. 28 references.—M. Kaelbling.

(See also Abstracts 3480, 3501, 3990)

LEARNING & MEMORY

3794. Alekseeva, I. A. O nekotorykh osobennostyakh sinteticheskoi deiatel'nosti kory golovno mozga sobak pri deistvii slozhnogo tsepnogo razdrzhitelia. (On some features of the synthetic activity of the cortex of the brain in dogs under the influence of a complex chain stimulus.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 742-750.—The chain stimulus utilized consisted of 3 components applied one after another without intervals, for 20 seconds each. After the 20-second action of the last component, the dog received food reinforcement during which this last component acted for 10 more seconds. For example, in the case of one dog the components were respectively the light of a 50-watt lamp, the sound of a buzzer, and pricking of the skin. The conditioned reflex to such a three-unit stimulus is elaborated after the very first combinations. However, the final strengthening of the reflex and the appearance of the specific salivation curve requires from 50-100 applications of the stimulus. As the conditioned reflex to the three-unit chain stimulus becomes established, the positive value of the first two components gradually decreases, dropping to zero. The different distribution of the components of the chain stimulus with respect to their "physiological force" in different dogs does not affect the nature of the conditioned salivation.—I. D. London.

3795. Alekseeva, I. A. Uslovnye refleksy na mnogokomponentnyi tsepoi razdrzhitel' v usloviakh svobodnoi dvigatel'noi deiatel'nosti sobaki. (Conditioned reflexes to a multicomponent chain stimulus under conditions of free motor activity.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 569-578.—It is shown that, just as in the case of elaborating conditioned salivary reflexes, when elaborating complicated forms of motor reactions to chain stimuli, the sequence of its components is of utmost importance; the result being that every preceding component of the chain becomes the conditioned signal for the appearance of the one following.—I. D. London.

3796. Alekseeva, I. A. Deistvie komponentov slozhnogo tsepnogo razdrzhitelia pri dlitel'nom otstavlenii. (Action of components of a complex chain stimulus entailing prolonged delay [of response].) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 241-247.—The development of retardation of response is a "specific feature in the synthesis of complex chain stimuli." Retardation of the conditioned response to components of a chain stimulus, applied in isolation during the time corresponding to the time of action

of the whole chain (60 sec.), was studied in dogs. The data obtained show that separate elements of the chain under conditions of 60 sec. delay do not produce retardation.—*I. D. London.*

3797. **Arbit, J.** Effects of drive strength and chemical block of autonomic impulses upon maze learning and retention. *Psychol. Rep.*, 1957, 3, 91-94.—A study is reported which attempts to obtain information pertaining to the effect of chemically produced autonomic blockade upon the learning and retention of a habit motivated by thirst. Utilizing two levels of drive it was found that impaired functioning of the autonomic nervous system did not affect the learning by rats of a 14-choice-point maze. Relearning measures showed an interaction between drive strength and autonomic nervous system functioning such that high drive during learning produced more efficient relearning when the learning occurred under conditions of autonomic blockade.—*C. H. Ammons.*

3798. **Atkinson, John W., & Reitman, Walter R.** Performance as a function of motive strength and expectancy of goal-attainment. *J. abnorm. soc. Psychol.*, 1956, 53, 361-366.—"Particular motives (Achievement, Affiliation, Power, etc.) are conceived as latent dispositions to strive for certain goal states (aims) that are engaged in performance of an act when the cues of the situation arouse the expectancy that performance of an act is instrumental to attainment of the goal of the motive. The total motivation to perform the act is conceived as a summation of strengths of all the motives that have been aroused by appropriate expectancies of goal-attainment cued-off by the situation. The relationship of achievement motive (as measured by imaginative TAT stories) to performance is shown to be significantly positive when the expectancy that performance is instrumental to producing a feeling of pride in accomplishment is aroused and few if any other expectancies of goal-attainment are aroused."—*A. S. Tamkin.*

3799. **Atkinson, Richard C.** A stochastic model for rote serial learning. *Psychometrika*, 1957, 22, 87-95.—"A model for the acquisition of responses in an anticipatory rote serial learning situation is presented. The model is developed in detail for the case of a long intertrial interval and employed to fit data where the list length is varied from 8 to 18 words. Application of the model to the case of a short intertrial interval is considered; some predictions are derived and checked against experimental data."—*M. O. Wilson.*

3800. **Bahrack, Harry P., Fitts, Paul M., & Briggs, George E.** Learning curves: Facts or artifacts? *Psychol. Bull.*, 1957, 54, 256-268.—"It is our purpose in this paper to show that the arbitrary choice of a cutoff point in the dichotomizing of continuous response distributions can impose significant constraints upon the shape of resulting learning curves, and that this can form the basis of misleading theoretical interpretations. We have chosen for illustration of this point the use of time-on-target scores as indicants of the level of skill attained in tracking tasks. However, we believe that the principles developed are quite general and apply to many learning situations." 18 references.—*W. J. Meyer.*

3801. **Barnett, C. D., & Cantor, G. N.** Pursuit rotor performance in mental defectives as a function of distribution of practice. *Percept. Mot.*

Skills, 1957, 7, 191-197.—52 male mental defectives were divided into four groups matched on the basis of scores obtained on preliminary trials on a Koerth-type pursuit rotor turning at a speed of 30 rpm. Massed practice consisted of 1-min. work, 20-sec. rest; distributed practice involved 1-min. work, 3-min. rest. Groups were given practice on the rotor on two consecutive days. Of chief interest was the similarity of the present findings to studies employing normal Ss. Manipulating distribution of practice results in changes in performance rather than in learning.—*C. H. Ammons.*

3802. **Barry, H., III, & Logan, F. A.** Latent learning in a straight alley. *Psychol. Rep.*, 1957, 3, 88.—The authors report no difference in relative rate of change in performance as a function of shift in size of reward after initial training. They suggest that the introduction of food reward is the limiting case of, and continuous in kind with, increases in amount of reward.—*C. H. Ammons.*

3803. **Barry, J. J., Jr., & Harrison, J. M.** Relation between stimulus intensity and strength of escape responding. *Psychol. Rep.*, 1957, 3, 3-8.—The purpose was the investigation, in 4 cats, of the functional relation between the strength of an escape response and intensity of the noise terminated. Under continuous reinforcement the response rate increased with stimulus intensity from the escape threshold to the maximum intensity used. At the lower intensities the low response rates were due primarily to the appearance of long pauses in responding rather than to an increase in latency of individual responses. On the variable-interval schedule, response rate increased with stimulus intensity up to a maximum value. For greater stimulus intensities response rates decreased. The escape threshold was lower under the continuous reinforcement than under the variable schedule.—*C. H. Ammons.*

3804. **Belenkov, N. IU.** Slozhnye bezuslovnye refleksy u koshek, lishennykh kory bol'shikh polushariy. (Complex unconditioned reflexes in cats, deprived of the cerebral cortex.) *Zh. vyssh. nervn. Deiatel.*, 1957, 7, 299-305.—5 decorticated cats were observed for 6 mon. to 3½ years. The preservation of various unconditioned reflexes in the decorticated cats varied. "The alimentary-motor reflex was manifest in the most pronounced form, overshadowing all the other unconditioned reflexes. The sexual reflex was manifest in the least pronounced form." The outer manifestation of all complex unconditioned reflexes in decorticated cats differs radically from that observed in normal animals. It may be assumed that the cerebral cortex is involved in the performance of complex unconditioned reflexes, "by lending them a more perfect shape necessary for the existence of the animals."—*I. D. London.*

3805. **Bennett, William Francis.** Autocorrelation and cross-correlation analyses of tracking behavior. *Dissertation Abstr.*, 1957, 17, 1604-1605.—Abstract.

3806. **Bottenberg, Robert Alan.** Asymptotic level, shift rapidity and conditional relationships in a two-choice learning situation. *Dissertation Abstr.*, 1957, 17, 1605.—Abstract.

3807. **Bruner, J. S.** Comment on "Effect of overtraining on subsequent learning of incidental cues." *Psychol. Rep.*, 1957, 3, 317-320.—The pres-

ent paper is concerned with experiments on the effect of drive conditions and overtraining on the ability of animals to register upon cues which are secondary to the solution of a learning problem. Three factors are examined: the use of differing modalities for primary and incidental cues, the degree of overlearning involved, and the number of trials of exposure to both primary and incidental cues given prior to the time that the primary cue is removed and before the animal is tested for his mastery of the incidental cue. It is apparent that there are several complex variables still to be investigated before the problem is understood.—C. H. Ammons.

3808. Calvin, Allen D., Perkins, M. J., & Hoffmann, Frederic K. The effect of nondifferential reward and non-reward on discriminative learning in children. *Child Developm.*, 1956, 27, 439-446.—“Two experiments are presented which indicate the importance of the type of preliminary training in evaluating the effect of nondifferential experience. When the amount of possible choices in the non-differential training is help constant, the results obtained fail to support Bitterman's recent theoretical formulations. Hull's position also is not supported in a statistically significant manner. The implications of these findings are discussed.—F. Costin.

3809. Campbell, Donald T. Enhancement of contrast as composite habit. *J. abnorm. soc. Psychol.*, 1956, 53, 350-355.—“Enhancement of contrast is noted as a bias occurring in judgments made of individuals belonging to 2 overlapping groups. This bias is derived from the learning theory principle of stimulus generalization as a function of similarity. An experimental analogue is tested, in which 2 similarity groups of nonsense syllables are associated with a partially overlapping series of loci on a spatial continuum. At stages of incomplete learning the predicted enhancement of contrast or exaggeration of difference between the 2 similarity groups of syllables is found. The principle is discussed in terms of social stereotypes, and as an illustration of the equivalence of perceptual and behavioral languages for describing the results of experience.”—A. S. Tamkin.

3810. Cofer, C. N., & Yarczower, M. Further study of implicit verbal chaining in paired-associate learning. *Psychol. Rep.*, 1957, 3, 453-456.—The Russell-Storms investigation of mediated facilitation in paired associate learning was repeated, except that synonym relationships rather than direct associative relationships were studied. While the results showed facilitation, they also indicated that synonymity without associative connection was unable to mediate facilitation in learning.—C. H. Ammons.

3811. Cohen, Bertram D., Brown, George W., & Brown, Marjorie L. Avoidance learning motivated by hypothalamic stimulation. *J. exp. Psychol.*, 1957, 53, 228-233.—Hypothalamic stimulation through implanted electrodes in cats when paired with a tone will subsequently produce an avoidance response (jumping a hurdle) when the tone is sounded alone. “The directional and motivational effects of conventional aversive drive-arousing techniques were compared with the central stimulation technique viewed as a drive-arousing operation.” The latter technique as opposed to the conventional procedure produces no pain cues.—J. Arbit.

3812. Dzidzishvili, N. N., & Nutsubidze, M. A. Uslovnyi refleks na narastanie intensivnosti zvuka. (Conditioned reflex to rising intensity of sound.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 726-731.—A motor defensive conditioned reflex to the rising intensity of a tone (200 cycles/sec.) was elaborated in a dog. The unconditioned stimulus was presented when the intensity of sound, after increasing very gradually for 25-40 sec., reached its maximum, 70 decibels above the level of audibility. The conditioned reflex was formed comparatively soon and attained such accuracy that the dog exhibited motor reactions only when the conditioned tone had reached the uppermost intensity following gradual increase. However, if a conditioned tone of maximum intensity was supplied at once, it did not evoke any motor reaction. The process of extinction of the elaborated conditioned reflex proved to be somewhat difficult. Analysis of the data leads to the conclusion that the “elaboration and course of the conditioned motor reflex in response to rising intensity of sound follows the same rules as that of the conditioned reflex in response to a successive complex of stimuli.”—I. D. London.

3813. Ekel, Jerzy. Zjawisko generalizacji i konkretyzacji przy wytwarzaniu obronnych odruchów warunkowych. (Phenomenon of generalization and concretization in the formation of defensive conditioned reflexes.) *Studia psychol.*, 1956, 1, 56-109.—In the course of the development of children's speech the word is sometimes used in a too much generalized way and sometimes in a completely nongeneralized way. The aim of the author's research was the experimental investigation of these two phenomena which he calls generalization and concretization. 4 groups of persons were investigated with the method of defensive conditioned reflexes using different combinations of positive stimuli (bells) and inhibitors (other sounds). Generalization was strongest when at first only positive stimuli were used with no inhibitors, concretization was observed when at first only one positive stimulus was used. 26 references.—M. Chojnowski.

3814. Eriksen, Charles W. Effects of practice with and without correction upon discrimination learning under absolute conditions. *USAF WA DC Tech. Rep.*, 1957, No. 57-71. iv, 16 p.—This very cleverly designed study investigated ability to discriminate among a series of stimuli with and without correction after each observation. The results show improvement in discrimination with practice with an inverse relationship between correction and discriminability of the stimulus series. It appears that a subject learns not to recognize individual stimuli but rather to establish a frame of reference for the series of stimuli as a whole.—R. T. Cave.

3815. Essman, W. B. Awareness of reinforcement in “learning without awareness.” *Psychol. Rep.*, 1957, 3, 399-400.—10 Ss were run in a “learning without awareness” experiment using nonsense forms to be categorized. Placement in half the categories was reinforced by E, who said “Good.” A significant increase in frequency of placement in these categories was found. Ss were closely questioned after the experiment. It was concluded that, although 8 out of 10 Ss had been aware of the rein-

forcing stimulus, none had been aware of its direct relation to the category of response.—C. H. Ammons.

3816. Eysenck, H. J. Reminiscence, drive, and personality theory. *J. abnorm. soc. Psychol.*, 1956, 53, 328-333.—The hypothesis that reminiscence on the pursuit rotor following massed practice should be greater for extraverts than for introverts was tested. The relationship between reminiscence and neuroticism was also investigated. Ss were 50 students, the measure of reminiscence was pursuit-rotor learning, and the personality measures were derived from the Maudsley Personality Inventory. The hypothesis was confirmed, and reminiscence was also found to be significantly greater for Ss high in neuroticism. 34 references.—A. S. Tamkin.

3817. Fanardzhian, V. V. Ob osobennostiakh sledovnykh uslovnykh refleksov u golubei. (On the features of trace conditioned reflexes in pigeons.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 597-603.—Data are adduced to show that there "possibly exist some elements of external (congenital) inhibition in the inhibitory phase of trace conditioned reflexes" in pigeons and that trace conditioned reflexes in pigeons, unlike those in dogs, are not generalized and are resistant to extinction. The "inertness of nervous activity" in pigeons and the "rapid establishment of transmarginal [trans-limital] inhibition" are noted as distinguishing features of higher nervous activity in these birds. "By their nervous organization all the experimental pigeons may be classified into two major groups: inhibitory and excitatory."—I. D. London.

3818. Fraisse, Paul, & Florés, César. Perception et fixation mnémonique. (Perception and mnemonic trace.) *Année psychol.*, 1956, 56, 1-11.—Does the richness of the perceptive response determine the richness of recall or is the mnemonic trace a function of the perceptive process? The present hypothesis assumes a functional independence of these two processes.—G. Rubin-Rabson.

3819. Fredenburg, Norma C. Response strength as a function of alley length and time of deprivation. *Proc. Iowa Acad. Sci.*, 1956, 63, 563-567.—From Hullian postulates the prediction is made that a greater difference in response strength would exist between animals run in long and short alleys under long deprivation than animals run in long and short alleys under low deprivation. No such significant difference was obtained. An alternative explanation of the phenomenon of within-chain delay of reinforcement has been offered by Spence and is found to be more adequate. The implications of the results to K-hypothesis are mentioned.—C. F. Haner.

3820. Gantt, W. Horsley. Effect of B-complex vitamins on conditional reflexes in dogs. *Amer. J. clin. Nutr.*, 1957, 5, 121-124.—4 dogs were subjected to a diet deficient in pantothenic acid or pyridoxine, following a control period during which a 100% differentiation between tones of different pitch had been established and maintained for some months. The excitatory conditional stimulus had been followed by a faradic shock to the foreleg. After 4-15 days of maintenance on the experimental (deficient) diet, the animals showed disturbances in the conditional reflexes. The disturbance consisted in the failure to differentiate, notwithstanding repeated practice, and it became progressively worse. At the same time there were no observable changes in behavior

or in unconditional reflexes. Return to adequate diet restored differentiation.—J. Brožek.

3821. Garcia, John; Kimeldorf, Donald J., & Hunt, Edward L. Spatial avoidance behavior in the rat as a result of exposure to ionizing radiation. *Brit. J. Radiol.*, 1957, 30, 318-321.—In order to determine if animals can learn to avoid an area in which they have previously been exposed to ionizing radiation, rats were irradiated while confined to one of two distinctive compartments of an enclosed alley. Following four cycles of radiation exposure alternated with sham irradiation, the partition between the two compartments was removed and the animals were given a free choice of residence in the alley for a test period. With but one exception in 40, the irradiated animals demonstrated an avoidance reaction towards the compartment in which they had been exposed to radiation. It was concluded that both X and gamma radiation can serve as unconditioned stimuli in the establishment of spatial avoidance behavior.—J. Garcia.

3822. Gavriliuk, A. A. Deistvie sul'fata magniia na korkovye protsessy vozbuzhdeniia i tormozheniia. (Action of magnesium sulfate on the cortical processes of excitation and inhibition.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 760-768.—The study was conducted on dogs by the method of alimentary conditioned reflexes to sound and light stimuli and on rabbits by the encephalographic method. Following parenteral administration of a 25% solution of magnesium sulfate 50-80 minutes before the experiment, conditioned reflex activity in dogs is reduced with the appearance of hypnotic phases. A considerable fall in the electric activity of the brain cortex is observed under the influence of magnesium sulfate, manifesting itself by a fall in the amplitude of electric oscillations. The disturbance of the cortical processes of excitation and inhibition revealed by the method of the conditioned reflex coincides with the disturbances in the electroencephalograms.—I. D. London.

3823. Geller, Irving. The effect of electroconvulsive shock on a punishment discrimination and on an extinguished punishment discrimination. *Dissertation Abstr.*, 1957, 17, 2071.—Abstract.

3824. Gleitman, H., & Kamrin, R. Proactive and retroactive inhibition in intentional and incidental learning. *Psychol. Rep.*, 1957, 3, 155-160.—Each of 252 Ss was trained in one of 6 conditions involving intentional or incidental learning of lists of names and retroactive and proactive inhibition. PI and RI were demonstrated in incidental learning. While RI was greater than PI for intentional learning, it was equal to PI in incidental learning. This effect was discussed in the light of Melton and Irwin's two-factor theory of retroactive inhibition.—C. H. Ammons.

3825. Górska, Teresa. Rola analizatora wzrokowego i kinestetycznego w procesie ćwiczenia ruchów docelowych. (The role of visual and kinesthetic analyzers in the process of training of the aiming movements.) *Studia psychol.*, 1956, 1, 142-163.—The aim of this experimental research consisted in the investigation of the mechanism of hitting with the hand at some point, and of the differences in the process and results of learning a series of aiming movements depending on the predominance of visual

or kinesthetic analyzer. Movements governed by kinesthetic stimuli are faster and more precise than movements governed by visual stimuli. It may be supposed that the visual fixing of the direction of aiming movement makes impossible the formation of correspondingly strong and differentiated connections in kinesthetic analyzer and consequently makes impossible the attainment of maximal efficiency of performed movement.—*M. Choynowski.*

3826. Gray, P. H. Irrelevant cue learning in the chick. *Psychol. Rep.*, 1957, 3, 345-352.—Lashley's contention that animals will not learn an irrelevant (introduced) stimulus while the original remains effective was tested with chicks in two experiments. The first experiment utilized Lashley's experimental design, that of form aspect introduced to size aspect. The chicks showed negative transfer, indicating that they had learned the circularity per se of the different-sized circles. The second experiment utilized a different experimental design, with color aspect introduced to color aspect. Chicks faltered when the new stimulus was added but quickly reached a significant level of performance. It was concluded that animals can learn irrelevant cues; Lashley's failure was due to his rats' learning only the bottom parts of the stimuli.—*C. H. Ammons.*

3827. Grishina, V. M. Vliianie efedrina na ulosvovoreflektornuiu deiatel'nost' sobak. (Effect of ephedrine on conditioned-reflex activity of dogs.) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 248-253.—Optimal effective doses of ephedrine, orally administered, are strictly individual for every dog and range from 0.005 to 0.06 mg/kg, raising the level of positive conditioned salivary reflexes and leaving undisturbed differential inhibition. Doses, exceeding the optima, result in disturbances of conditioned and unconditioned reflex activity "in the form of phase states."—*I. D. London.*

3828. Gvishiani, G. S. Deistvie barbamila na ulosvovoreflektornuiu deiatel'nost' sobak v norme i pri eksperimental'noi gipertenzii. (The effect of barbamil [sodium amyltal] on the conditioned reflex activity in dogs, both normal and with experimental hypertension.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 579-583.—The changes in conditioned reflex activity and blood pressure in dogs, resulting from prolonged administration of sodium amyltal in small doses were studied before and after the development of hypertension. In animals with a normal background of conditioned-reflex activity prolonged application of sodium amyltal reduces the positive conditioned reflexes, disinhibits differentiation, and retards the development of extinctive inhibition. With hypertension effects are reversed. Thus, in cases of reflexogenic hypertension sodium amyltal tends to reduce the "general inhibitory state in the cortex related to this pathology of the cardio-vascular apparatus." "The normal course of the basic cortical processes being thus restored, it is capable of lowering the high tone of the subcortical centers and weaken the intense tonic vascular constriction in cases of various forms of vascular spasms, notably in hypertonia."—*I. D. London.*

3829. Hanson, Harley M. Discrimination training effect on stimulus generalization gradient for spectrum stimuli. *Science*, 1957, 125, 888-889.—Pigeons were trained to peck at a key illuminated by

monochromatic light. Groups of six were given discrimination training in which the positive stimulus was 550 mμ. The negative stimuli for various groups were 555, 560, 570, and 590 mμ, respectively. Responses to positive stimuli were rewarded according to a variable-interval schedule, while responses to the negative stimuli were never rewarded. Two generalization tests were administered to each bird on successive days. The results "do not support the notion that discrimination training weakens behavior to the negative stimulus and nothing more." The "major result of discrimination training is to bring a large proportion of the responses available in extinction under the control of another range of stimuli."—*S. J. Lachman.*

3830. Heyman, William. Certain relationships between stimulus intensity and stimulus generalization. *J. exp. Psychol.*, 1957, 53, 239-248.—"This experiment sought to determine the generalization function along the stimulus intensity continuum and to verify whether stimulus intensity is functionally related to indicators of habit strength, of reaction potential, and of the slope and curvature of the stimulus generalization gradient." The experimental findings of this and related studies are "susceptible of interpretation in terms of a simple stimulus generalization paradigm and the stimulus intensity dynamism ratio which Hull had suggested earlier." 16 references.—*J. Arbit.*

3831. Iwahara, S. Hull's concept of inhibition: A revision. *Psychol. Rep.*, 1957, 3, 9-10.—Three of the basic formulae relating concepts of inhibition and excitatory potential are criticized and an alternative suggested.—*C. H. Ammons.*

3832. Jacobsen, Erik, & Sonne, Else. The effect of benactyzine on the conditioned responses in the rat. *Acta pharm. tox., Kbh.*, 1956, 12, 310-320.—The effect of benactyzine on the conditioning and extinction of avoidance responses in a shuttle box was studied. Benactyzine appeared to facilitate acquisition of the avoidance response and to bring about some recovery of the response after extinction.—*G. A. Heise.*

3833. Kamin, Leon J. The effects of termination of the CS and avoidance of the US on avoidance learning: An extension. *Canad. J. Psychol.*, 1957, 11, 48-56.—A further study of the separate effects of termination of the CS and avoidance of the US in avoidance learning. Electric shock was used through the floor of a shuttlebox. Ss were grouped as follows (2 × 2 design): (1) Ss could terminate the CS and avoid the US; (2) Ss could only terminate the CS; (3) Ss could only avoid the US; and (4) Ss could neither terminate the CS nor avoid the US. The first group surpassed all others and rapidly acquired a stable CR. Both termination of the CS and avoidance of the US facilitated frequency and latency of CR's and there was a significant interaction.—*R. Davidson.*

3834. Kaplan, M. Intensity-escape functions under interval schedules of reinforcement. *Psychol. Rep.*, 1957, 3, 251-254.—When escape behavior is maintained by interval schedules of reinforcement, the function relating response strength to noxious stimulus intensity passes through a maximum. The following suggestions are presented and discussed: (1) As duration of the fixed- or mean variable-

interval is decreased, the function is displaced upward along the response-strength axis, and the maximum shifts to higher intensities. (2) Under regular reinforcement, the function need not be expected to pass through a maximum, although this type of reinforcement may be found to provide the limiting case for short durations in interval schedules.—C. H. Ammons.

3835. Kendler, Howard H., Pliskoff, Stanley S., D'Amato, Michael R., & Katz, Sanford. Nonreinforcements versus reinforcements as variables in the partial reinforcement effect. *J. exp. Psychol.*, 1957, 53, 269-276.—Studied the relative influence of intermittent reinforcements and intermittent nonreinforcements on resistance to extinction in an instrumental runway situation. "The results suggest that the locus of the partial reinforcement extinction effects lies in the understanding of the effects of the nonreinforced training trials. An explanation was offered that involved the fractional anticipatory goal response concept."—J. Arbib.

3836. Kintsch, W., & Wike, E. L. Habit reversal as a function of length of partial delay of reinforcement. *Psychol. Rep.*, 1957, 3, 11-14.—Rats were trained in a T-maze position response under conditions of immediate reward, 10-sec. delay of reinforcement on 50% of the correct responses and 30-sec. delay on 50% of the correct responses. Following training the locus of the food reward was shifted to the opposite side of the T-maze and reinforcement was immediate for all Ss. 30-sec. partial delay resulted in slower learning than no delay. Ss with no delay and 10-sec. partial delay reversed their position responses faster than Ss with 30-sec. partial delay. Extinction results agreed with previous studies using runways.—C. H. Ammons.

3837. Kisliakov, V. A. Izmenenie uslovykh vestibularno-dvigatel'nykh refleksov u sobak posle labirintektomii. (Alteration of conditioned vestibular-motor reflexes in dogs after labyrinthectomy.) *Fiziol. Zh. SSSR.*, 1957, 43, 271-278.—Data are adduced to show that in the system of relationships obtaining between the vestibular and motor analyzers the latter is dominant. Reduction of vestibular impulses is to a significant degree compensated for by it and by the other analytic systems involved in the compensatory process. Labyrinthectomy alteration of conditioned-reflex activity, in reflecting the cortical compensatory process, demonstrates at the same time vestibular dependence on cortical regulation.—I. D. London.

3838. Klein, Richard Milton. Partial primary reinforcement as a parameter of secondary reinforcement. *Dissertation Abstr.*, 1957, 17, 1608-1609.—Abstract.

3839. Klovchov, A. M. K voprosu o vzaimootnosheniakh uslovnogo bezuslovnogo refleksov. (On the problem of the interrelation between conditioned and unconditioned reflexes.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 263-271.—"Changes in unconditioned food, acid, and motor defense reflexes were studied in 6 dogs during the elaboration of positive conditioned reflexes and under the influence of differential inhibition. It was found that the initial phase of the unconditioned reflex (corresponding to the time of action of the unconditioned stimu-

lus) changed in a similar way in all dogs: under the influence of positive conditioned reflexes, unconditioned salivation from the very beginning acquired a more intensive character, while under the influence of differential inhibition the onset of unconditioned secretion was delayed. After the initial increase under the influence of positive conditioned reflexes and after the initial retention under the action of differential inhibition, the total magnitude of unconditioned salivation increased in some dogs or remained unchanged, while in others it diminished in either case. In cases of motor defense reflexes, similar changes were observed in all the dogs: positive conditioned reflexes increased the magnitude of unconditioned motor defense reactions, while the negative reflexes diminished it."—I. D. London.

3840. Klugman, Samuel F. Retention of affectively toned verbal material by normals and neurotics. *J. abnorm. soc. Psychol.*, 1956, 53, 321-327.—Hypotheses derived from Freud's theory of repression were tested by evaluating the effects of affective intensity and quality of verbal material upon retention by normal and neurotic Ss. Personally meaningful 2-word phrases were associated with nonsense syllables and learned to a criterion. 1 week later recall and relearning were tested. The findings did not support Freud's hypothesis of motivated forgetting but suggested that "forgetting is based on differential interactions between normal-neurotic grouping and affective intensity and quality factors, especially the former." 19 references.—A. S. Tamkin.

3841. Kologrivova, IU. G. K voprosu o trenirovke ugasatel'nogo tormozheniia. (On the problem of training extinctive inhibition.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 751-759.—2 conditioned food procuring reflexes to light and sound stimuli were elaborated in each of 5 dogs. One of the positive reflexes was daily subjected to "acute intermittent extinction" until the latter set in after presentation of a single conditioned stimulus without reinforcement. It was found that systematic extinction of a reflex brings about a "training of extinctive inhibition" in dogs which influences in various degrees the rate of extinction of other reflexes. This influence is manifested first of all in reflexes with a common analyzer, then in reflexes with a common motor reaction, and to a negligible degree in reflexes having only "common cortical representation of the food center."—I. D. London.

3842. Kraemer, Alfred J. Transfer of training as a function of place and response learning. *Dissertation Abstr.*, 1957, 17, 1818-1819.—Abstract.

3843. Kulagin, V. K. Izmenenie oboronitel'nykh uslovykh refleksov v protsesse razvitiia travmaticheskogo shoka. (Changes in conditioned defensive reflexes in the course of development of traumatic shock.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 732-741.—Changes in conditioned defensive reflexes were studied in dogs on which mechanical trauma was inflicted, leading to the development of shock. Previously elaborated stable conditioned reflexes increased during the erectile phase of shock. In the torpid phase of shock, the conditioned reflex considerably diminished with appearance of phasic conditions. Inhibition of various components of the complex conditioned defensive reaction did not develop simultaneously: motor reaction disappeared

first, then that of the heart, the vessels, and respiration, with complete disappearance of conditioned reflexes when arterial pressure dropped below 50 mm Hg. In the erectile phase of shock new conditioned defensive reflexes could be elaborated rather easily and were of a generalized character. It was not possible to establish new conditioned responses during the torpid phase of shock. It is concluded that in cases of shock inhibition does not develop simultaneously in various nervous centers.—*I. D. London.*

3844. Lawrence, Douglas H. Learning. *Annu. Rev. Psychol.*, 1958, 9, 157-188.—Literature for the period April 1956 to April 1957 is reviewed under the headings of stimulus and response, drive, reinforcement, extinction, and verbal learning. 156-item bibliography.—*A. J. Spross.*

3845. Lewis, Don, & Lowe, William. Retention of skill on the SAM complex co-ordinator. *Proc. Iowa Acad. Sci.*, 1956, 63, 591-599.—Subjects practiced 10 trials per session on the SAM Complex Co-ordinator, half under massed practice, half under more distributed. The first 10 sessions were weekly. Sessions 11-14 were also weekly but 11 was separated from 10 by a 3-week vacation. Session 15 occurred 4 months after session 14. The distributed practice group showed significantly better results than the massed. After the first 4 sessions each new session showed some decrement over the concluding tests of a previous session, but this is considered by the authors as due to loss of set or need to "warm up." The decrement at the beginning of session 11 is no greater than in other sessions separated by only a week. The initial decrement in session 15 was greater than in the preceding sessions and over-all performance lower than the preceding sessions but not significantly so. The decrements are greater for the distributed practice group than the massed and for the high-level performers than the low-level ones.—*C. F. Haner.*

3846. Lichtenstein, P. E. On "the dilemma of fear as a motivating force." *Psychol. Rep.*, 1957, 3, 213-216.—Egash has asserted that the theory that fear may operate as a motivating force in the development of abnormal fixations leads to a dilemma since the theory cannot account for the source of the fear. It is suggested that the dilemma may be resolved through recognition of a source of fear not considered by Egash. This source is the shock or other traumatic stimulus which gives rise to a conditioned fear of the apparatus. Fear, thus induced, may persist without obvious signs of extinction and without further reinforcement.—*C. H. Ammons.*

3847. Maccoby, Eleanor E., Levin, Harry, & Selye, Bruce M. The effects of emotional arousal on the retention of film content: A failure to replicate. *J. abnorm. soc. Psychol.*, 1956, 53, 373-374.—This study is an attempt to replicate previous findings that recall after one week is a function of emotional state at the time of exposure. The hypothesis is if children are frustrated just before they see a movie, so that aggressive impulses are aroused, they remember more of the aggressive content of the film than do children who are not frustrated. The Ss were 190 children in 8 fifth and sixth grade school-rooms. By means of experimental techniques half of the Ss were frustrated and half non-frustrated, then a movie was shown. 1 week later the Ss were given

a 66-item multiple-choice recognition test in the content of the movie they had seen. There were no significant differences between the frustrated and nonfrustrated groups in their recall of any of the different categories of film content.—*A. S. Tamkin.*

3848. Mackintosh, Irene. Theoretical predictions and response measures. *Canad. J. Psychol.*, 1957, 11, 57-64.—Without differential cues available to signify appropriateness, one instrumental response was rewarded for a variable number of trials and then another response was rewarded for a variable number of trials, alternately. On the basis of the theoretical reaction potentials, the probability of inappropriate response on each trial was determined according to the procedures used by Hull. For the middle third of the trials there was a significant relationship between theoretical and empirical data, but not for the initial or terminal thirds. Therefore, Hull's formulae cannot predict responses satisfactorily in a situation involving reversal learning.—*R. Davidson.*

3849. Mayer, Sylvia R. The effect of induced tension during training on visual form recognition. *J. educ. Psychol.*, 1957, 48, 11-17.—Subjects are 28 men, aged 22 to 40. Effect on recognition of several conditions of training tension is compared. One set of tension conditions is induced by activity unrelated in pattern to training forms (dynamometer performance); another set of conditions is induced by activity directly related in pattern to training forms (tracing and drawing). Results indicate increases in dynamometer-induced tension produced marked inhibition in learning and that the form-related pattern of tension-inducing activity does not appear to be a major determinant of visual form learning, since tracing results in recognition decrement, while drawing results in recognition improvement. It is suggested that effect of tension on learning may be determined by difficulty and coordination requirements of tension-inducing activity.—*S. M. Schoonover.*

3850. Mechner, Francis. Probability relations within response sequences under ratio reinforcement. *Dissertation Abstr.*, 1957, 17, 1819.—Abstract.

3851. Miles, Guy H., & Lewis, Don. Age and handedness as factors in the performance of a complex pursuit task: Results of a study at the Iowa state fair. *Proc. Iowa Acad. Sci.*, 1956, 63, 568-575.—A study comparing the learning curves of right and left handed male subjects in age groups of 9-10, 11-12, 13-14, 15-16, and 17-35 on the Iowa Pursuitmeter was conducted before onlookers at the Iowa State Fair. Significant differences between age groups were found but not between right and left handed subjects. The only sizable, but insignificant, handedness difference was at the age predicted by the authors. Maturation of the steering and pointing responses obtained is judged as complete by 16 years of age. Comparison of the "fair" and laboratory groups revealed slight differences favoring the former. The "fair" data is considered by the authors as reliable and the results encouraging as to such investigation.—*C. F. Haner.*

3852. Mink, Walter David. Semantic generalization as related to word association. *Dissertation Abstr.*, 1957, 17, 2072-2073.—Abstract.

3853. Napalkov, A. V., & Karas', A. IA. Ustranenie patologicheskikh uslovnoreflektornykh svyazei pri eksperimental'nom gipertenzivnom sostoianii. (Elimination of pathological conditioned-reflex connections in the experimental hypertensive state.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 402-409.—A prolonged hypertensive state was created in 5 dogs. All the previously elaborated alimentary conditioned reflexes disappeared with dysnea and vomiting setting in. The state was chiefly brought about by the "development of a complex of pathological hypertensive conditioned connections which did not extinguish even though elicited without reinforcement by an unconditioned stimulus 900 times or more." The extinction of these reactions proved possible under "conditions of intense excitation in other centers of the cerebral hemispheres." "The pathological conditioned connections could also be eliminated by switching over the pathological stimuli to an unconditioned alimentary reinforcement and by using secondary extinction." On elimination of the system of pathological connections, the dogs returned to normalcy.—I. D. London.

3854. Nawrocka, Wiktoria. Z badań nad rolą analizatora wzrokowego i kinestetycznego oraz słowa przy uczeniu się szeregu ruchów wolnych u dzieci przedszkolnych. (Investigations of the role of visual and kinesthetic analyzers and of the word in the learning of a series of free movements by preschool children.) *Studia psychol.*, 1956, 1, 126-141.—97 children divided into 3 groups had to learn a series of simple movements which were either: (1) shown to them; or (2) described; or (3) performed with child's hands by the experimenter. The first method was the most efficient, the last one the least.—M. Chojnowski.

3855. Noble, C. E. Human trial-and-error learning. *Psychol. Rep.*, 1957, 3, 377-398.—This article reviewed the initial stages in the development of a program of experimental studies of human compound trial-and-error learning. Research employed a serial multiple-choice apparatus of analytic design and high reliability, carried out in a laboratory especially constructed for this purpose. Within the framework of the S-R reinforcement theory of behavior, a rational equation was proposed to account for certain detailed features of sequential learning phenomena. Data are in agreement with the equation, its parameters varying according to theoretical expectation.—C. H. Ammons.

3856. Noble, C. E., Stockwell, F. E., & Pryer, M. W. Meaningfulness (m') and association value (a) in paired-associate syllable learning. *Psychol. Rep.*, 1957, 3, 441-452.—200 undergraduates rated 100 "nonsense syllables" selected at random from a corrected version of Glaze's list on a 5-point schedule of number of associations. Scaling the frequencies by the method of successive intervals showed the data to be highly reliable. Association value (a) was a curvilinear function of scaled meaningfulness (m'), but mean ratings (a') were linearly related to m' . The interval m' scale was considered to be methodologically superior to the 2 ordinal scales. Comparisons were made with previous research on association value and meaningfulness (m). 40 Ss practiced for 11 trials with lists of 10 paired associates representing 5 equidistant points on the m' scale. Rate of

acquisition was a direct function of m' . Difficulty measured by errors was an inverse positively-accelerated function of m' .—C. H. Ammons.

3857. Pereboom, A. C. An analysis and revision of Hull's Theorem 30. *J. exp. Psychol.*, 1957, 53, 234-238.—An experimental test was made of Hull's Theorem 30 which says that a rapid learning process occurs under a new and distinct habit when a discrete shift in reward magnitude occurs during a maze-learning process. Did not find the abrupt performance change and an attempt was made to reconcile this finding with the theorem. Suggests that if learning is a permanent phenomenon, then with each successive change in reward magnitude a new habit develops which displaces previous habits.—J. Arbit.

3858. Pieter, Józef. Rola instrukcji słownej a pokazowej w nabywaniu sprawności ruchowych. (The role of verbal instruction and demonstration in the mastering of motor exercises.) *Studia psychol.*, 1956, 1, 164-175.—This is a preliminary report on the investigation carried on under the author's direction by a group of students of the Academy of Physical Education, and relating to the efficiency of different kinds of instruction (spoken, written and demonstrated) in the learning of some gymnastic movements. The most efficient form of instruction appeared to be demonstration. It seems that spoken and written instructions do not help but impede, interfering with the action of demonstration.—M. Chojnowski.

3859. Pisoni, Stephanie, & Wagner, Allan. The role of special instructions in the successive performance of different tasks on the star discriminator. *Proc. Iowa Acad. Sci.*, 1956, 63, 556-563.—4 groups of female subjects learned an identical motor-perceptual task using the Star Discriminator. Group I then received special instruction as to possible changes in the pattern of responses to be made to the same stimuli and found the responses reversed 180° on the interpolated learning task. Group II received the same instructions but found the responses for interpolated learning randomly rearranged. Group III and IV received no instruction but learned interpolated tasks the same as I and II respectively. Following practice all relearned the original task. Group I was consistently superior to the others on both error and correct response measures on both interpolated learning and relearning. Group II was consistently inferior. The results are interpreted in terms of generalized sets induced by the instructions.—C. F. Haner.

3860. Rebhun, Martin T. The effects of shock threat on the use of context stimuli in learning. *Dissertation Abstr.*, 1957, 17, 1609.—Abstract.

3861. Rockway, Marty R., Eckstrand, Gordon A., & Morgan, Ross L. The effect of variations in control-display ratio during training on transfer to a low ratio. *USAF WADC Tech Rep.*, 1956, No. 56-10. iv, 12 p.—The relationship between amount of transfer of a two dimensional tracking skill and degree of physical similarity between training and test control-display (C/D) ratios were investigated. The results indicate: (1) during training performance was a function of the C/D ratio used; (2) practice with all training ratios produced significant positive transfer to the test ratio; (3) the

differences among subjects was not significant.—*R. T. Cave.*

3862. Schastnyĭ, A. I. Vyivlenie izbiratel'noi sistemnosti v rabote bol'shikh polusharii putem podstanovki tormoznykh uslovnykh razdrashitelei. (Disclosure of selective systemic character in the activity of the cerebral hemispheres by substitution of inhibitory conditioned stimuli.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 398-401.—A system of conditioned alimentary reflexes was first elaborated in 4 dogs, and later a system of conditioned electrodefensive reflexes. "By transferring the inhibitory conditioned stimuli of the defensive system to first place of the alimentary system, it proved possible to reveal the selective systemic character of activity of the cerebral hemispheres." This phenomenon may be accounted for by the action of "negative induction from the defensive center to the alimentary one."—*I. D. London.*

3863. Seymour, W. D. Transfer of training on engineering skills. *Percept. Mot. Skills*, 1957, 7, 235-236.—If skills are acquired by a selective process, as experiments indicate, and transfer is actually an enhanced capacity for more frequent selection of appropriate muscle groups, we will understand transfer phenomena more adequately by investigating the nature of simple skills exhaustively.—*C. H. Ammons.*

3864. Spiegel, Stanley. The effect of consistent and inconsistent punishment on the exploratory behavior of the white rat. *Dissertation Abstr.*, 1957, 17, 2060-2061.—Abstract.

3865. Tagiev, SH. K. Dinamika obrazovaniia slozhnykh dvigatel'nykh uslovnykh refleksov na tsepi razdrashitelei u karpov, golubei i krolikov. (Dynamics of establishing complex motor conditioned reflexes to a chain of stimuli in carps, pigeons, and rabbits.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 306-314.—Differentiated motor conditioned reflexes can be elaborated in rabbits, pigeons, and fish to two positive triple-chained stimuli, though in fish establishment of retardation of response developed slowly and is unstable. A test of the action of individual components in the stimuli chain, as well as of a change in their sequence, reveals that the components by themselves lose their "signal value" for rabbits and pigeons, thereby testifying to a well developed capacity in rabbits and pigeons for "analysis and synthesis" of complex stimuli. Repeated tests of separate components under similar conditions with fish did not result in loss of their "signal value," which points to a lower developmental level in the analytic and synthetic mechanisms of the nervous system in fish. "When the components of the stimuli chain are applied separately, the conditioned reaction in animals is inhibited more rapidly to the first and second components than to the third one which is linked with food reinforcement in a more stable way."—*I. D. London.*

3866. Talanina, L. KH. Irradiatsiia i kontsentratsiia tormoznogo protsessa pri differentsirovke i uslovnom tormoze u sobak raznogo tipa nervnoi sistemy. (Irradiation and concentration of the inhibitory process under differentiation and conditioned inhibition in dogs with various types of nervous system.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 272-277.—"Irradiation and concentration of the inhibitory process under differentiation and conditioned inhibition (in the auditory and optical analyzers) in dogs

with various types of nervous system" were studied by means of the classic salivary method of conditioned reflexes. In dogs with a weak type of nervous system irradiation and concentration of the inhibitory process under differentiation and conditioned inhibition proceeds more slowly than in dogs of the strong type. At the beginning of the elaboration of conditioned inhibitory reflexes, successive inhibition is deeper and more lasting in dogs with nervous system of the sanguine type than in dogs of the strong unequilibrated type. As differentiation and conditioned inhibition become stable, concentration of the inhibitory process is observed to a greater extent in dogs of the strong nervous system type than in dogs of the weak type.—*I. D. London.*

3867. Terrell, Glenn, Jr., & Kennedy, Wallace A. Discrimination learning and transposition in children as a function of the nature of the reward. *J. exp. Psychol.*, 1957, 53, 257-260.—4- and 5-year and 8- and 9-year children were randomly assigned to five reward conditions: praise, reproof, candy, token, and control. "The candy-reward group learned significantly more quickly than did any of the other groups; while on the transposition test, the candy group was significantly superior to all groups except the token-reward group. The older children learned significantly more quickly than did the younger, but there was no age-level difference on the transposition test."—*J. Arbit.*

3868. Thompson, R. Retroactive effect of interpolated visual stimulation. *Psychol. Rep.*, 1957, 3, 183-188.—4 groups of 8 rats each were given 6 trials daily for 6 consecutive days on a horizontal-vertical discrimination problem. The groups were differentiated on the basis of the amount of exposure to generalized light stimulation immediately following each daily session. Performance scores revealed that those Ss receiving darkness immediately following each daily session learned the discrimination more efficiently than those Ss receiving light stimulation. These data were interpreted in terms of the Müller and Pilzecker perseveration theory of memory.—*C. H. Ammons.*

3869. Thornton, Givens L. The effect of stimulus intensities upon sensory pre-conditioning. *Proc. Iowa Acad. Sci.*, 1956, 63, 620-626.—2 experimental groups of rats were given paired visual and auditory stimuli, of high intensity in Group I and low in Group II. 4 controls were subjected to single stimuli in the pre-condition trials consisting of a high auditory stimulation for Group III, intense visual for IV, and auditory and visual stimuli of low intensity for V and VI respectively. Groups I, III, and IV, were conditioned under intense auditory and II, V and VI, under low auditory stimulation. Sensory pre-conditioning was tested with intense visual stimuli for I, III, and IV, and low visual in the others. Only Group II gave any indication of sensory pre-conditioning. Response between II and other low visual groups (V and VI) differed significantly or nearly so, as did the difference between the two experimental groups (I and II). Possible explanations for the obtained results are mentioned.—*C. F. Haner.*

3870. Timofeev, N. N. K sravnitel'noi fiziologii ekstero- i interoseptivnykh uslovnykh refleksov. (On the comparative physiology of exteroceptive

and interoceptive conditioned reflexes.) *Fiziol. Zh. SSSR*, 1957, 43, 259-265.—The relationship between analyzers for the internal and external environment was studied in fish, amphibia, and birds by means of specially designed techniques for establishing conditioned reflexes to exteroceptive and interoceptive stimuli. Conditioned exteroceptive and interoceptive reflexes were shown to conform to the same functional pattern in lower vertebrates (fish and amphibia), contrary to what is observed in the more highly organized forms of life (birds).—*I. D. London*.

3871. Tkacheva, G. R. K fiziologicheskomy obosnovaniyu kinezoterapii bol'nykh s postinsul'tnymi dvigatel'nymi narusheniyami. (On the physiological substantiation of kinezotherapy on patients with organically induced motor disorders.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 561-568.—Elaborating conditioned motor reactions with verbal reinforcement in subjects, suffering from hemiparesis due to faulty cerebral blood circulation, and using passive extension of the affected and healthy forearms as conditioned stimulus, the following was found: (1) conditioned reactions to kinesthetic stimulation are difficult to elaborate and, if elaborated, are very unstable; (2) it is difficult to elaborate rough differentiations to passive abduction of the affected arm to another angle and, as a rule, it is impossible to elaborate fine differentiations; (3) successive inhibition after the action of the differentiation stimulus is greatly pronounced; (4) it is difficult and sometimes impossible to reverse the "signal meaning" of the conditioned kinesthetic stimuli. Clinical improvement of motor functions following a course of gymnastic exercises was accompanied by a change in the experimental picture with greater stability of the conditioned reflexes, ease in elaborating differentiations, etc.—*I. D. London*.

3872. Urner, A. H. Spontaneous lever pressing in monkeys. *Psychol. Rep.*, 1957, 3, 361-362.—Performance of 4 Rhesus monkeys in a new lever pressing apparatus is described. Response level is adequate for experimental purposes and the apparatus may be easily modified.—*C. H. Ammons*.

3873. Urner, Albert Heinz. The effect of gamma radiation on the reorganization of a learned complex maze habit. *Dissertation Abstr.*, 1957, 17, 1610.—Abstract.

3874. Usachev, V. V. Vliianie radial'nykh uskorenii na uslovnye sosudisto-dvigatel'nye refleksi. (Effect of radial acceleration on conditioned vasomotor reflexes.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 555-560.—Conditioned vasomotor reflexes were studied before and after radial acceleration. Plethysmographic recordings were noted. As time of acceleration approaches, heightened conditioned vasomotor reactions are observed with a slight decrease of latent period. Following action of acceleration, a sharp drop in the magnitude of the conditioned reactions are observed. Differentiations are also disinhibited. It is suggested that these changes "under the action of radial acceleration testify to the predominance of the inhibitory process in those parts of the cortex which control vascular tone."—*I. D. London*.

3875. Vasil'eva, O. N. Vzaimootnosheniia mezhdu bezuslovnymi i uslovnymi oboronitel'nymi

refleksami pri perekrytii. (Interrelations between unconditioned and conditioned defensive reflexes in backward conditioning.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 389-397.—Conditioned reflexes were elaborated by the "Petropavlovskii motor-defensive method" with unconditioned electric stimulation of the skin of the right forepaw preceding acoustic and photic signals of varying strengths. The reaction elaborated in response to the conditioned stimuli consisted in a protracted lifting of the right forepaw to a certain height at which the circuit would be broken. When conditioned signals were preceded by electric stimuli of considerable strength no weakening of conditioned reflexes was observed. Weakening of conditioned reflexes to the extent of complete absence of any response to the conditioned stimulus was observed only in cases of backward conditioning by weak electric stimuli. The weakening or absence of conditioned reflexes was observed even in cases of backward conditioning by such weak electric skin stimuli which do not produce any unconditioned motor reaction.—*I. D. London*.

3876. Vasilevskaia, N. E. Osobennosti protekaniia tsepnykh uslovnnykh refleksov pri dopolnitel'nom vvedenii v organizm kisloty i shchelochi. (Features of the course of chain conditioned reflexes with supplementary introduction into the organism of acid and alkali.) *Fiziol. Zh. SSSR*, 1957, 43, 511-516.—With acid dosage, along with a decrease in magnitude of a primary interoceptive acid reflex, a sharp drop occurs in magnitude of a second-order exteroceptive conditioned reflex developed on the basis of the former. With alkali dosage reverse effects are noted. Specially developed exteroceptive conditioned stimuli can modify the second-order conditioned reflex in the same way that administration of acid and alkali do directly. Changes in the conditioned reflex are associated with shifts in the acidic content of urine.—*I. D. London*.

3877. Vavilova, N. M. Razvitie sledovykh uslovnnykh refleksov u sobaki v ontogeneze. (Development of trace conditioned reflexes in the dog in ontogenesis.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 416-424.—Gradual delay of the moment of unconditioned reinforcement is the best way of developing trace reflexes. It proved possible to elaborate secondary conditioned trace reflexes with pauses of 40-60 seconds in 3 months old puppies, 2 to 2½ minutes pauses in puppies aged 7 months, and 3½ to 4 minutes pauses in one year old puppies. The rate of elaboration of trace conditioned reflexes and the duration of the inhibitory phase increases with the age of the puppies. In younger puppies (3 months old) the motor component of the alimentary trace conditioned reflex develops more rapidly and is more stable. It proved impossible to elaborate trace reflexes in 3 month old puppies without first developing conditioned reflexes with a short delay. The task appeared "too difficult for the nervous system . . . and resulted in prolonged disturbances of their higher nervous activity."—*I. D. London*.

3878. Vediaev, F. P. K sravnitel'noi fiziologii uslovnnykh refleksov na slozhnye razdrashiteli. (On the comparative physiology of conditioned reflexes to complex stimuli.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 786-793.—Using conditioned motor defensive and motor food reactions in pigeons and

rabbits, it is shown that the stability of conditioned responses, as well as the accuracy of differentiating a complex stimulus from its components, is considerably higher in the latter than in the former. The analysis and synthesis of successive complex stimuli in these organisms proceed slower than those of the simultaneous complex stimuli.—I. D. London.

3879. Vediaev, V. P. K fiziologii uslovykh reflektsov na kompleksnye razdrazhiteli u ryb. (On the physiology of conditioned reflexes to complex stimuli in fish.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 604-611.—Conditioned positive and negative motor reactions to simultaneous and successive complex stimuli may be developed in carp. The presence or absence of motor reactions to a complex stimulus or to components thereof are in many respects determined not merely by the physiological strength of the stimulus, but also by the "level of excitability of the central nervous system of the fish at the given moment." Features associated with the development of differentiative inhibition, speed of extinction of the orienting reaction, and appearance of "intersignal motor reactions" bear witness to the predominance of the excitatory processes over the inhibitory.—I. D. London.

3880. Verhave, T., Owen, J. E., Jr., & Robbins, E. B. Effects of secobarbital and pentobarbital on escape and avoidance behavior. *Psychol. Rep.*, 1957, 3, 421-428.—In the present study the effects of 5 dosages of secobarbital and 4 dosages of pentobarbital on the performance of rats in a conditioned avoidance situation were investigated. Dose-response relationships were clearly demonstrated, with the effects of the 2 compounds being very similar. In general it was observed that the degree of the effect on avoidance behavior was close to the degree of the effect on escape responding, indicating a relatively nonspecific effect of the drugs on escape and avoidance behavior.—C. H. Ammons.

3881. Warren, J. M., & Sinha, M. M. Effect of differential reinforcement on size preferences in cats. *Percept. Mot. Skills*, 1957, 7, 17-22.—The proportion of preference for stimuli 4, 8, 12, 16, and 20 cm. in length was determined by the method of equivalence before and after differential reinforcement of the 16 cm. stimulus. 10 normal cats, 8 with lesions of the frontal cortex, and 7 with lesions of the prefrontal cortex, were studied. Prefrontal cats were inferior to the normals in discriminating visual size. All cats had a slight preference for smaller stimuli before training under conditions of differential reinforcement, and a pronounced preference for the larger after training. No significant correlations between measures of change in preference and performance on discrimination training were obtained.—C. H. Ammons.

3882. Wells, Ruth Holm. Learning through stimulus satiation: One trial a day. *Dissertation Abstr.*, 1957, 17, 1820-1821.—Abstract.

3883. Whittaker, J. O. Effects of thyroid administration upon avoidance conditioning. *Psychol. Rep.*, 1957, 3, 89-90.—Apparently the contradictory results of previous studies of the relation between thyroxin administration and conditioning stem from the fact that Es worked with only one degree of hyperthyroidism. While small dosages of thyroxin

appear to facilitate conditioning, massive dosages are detrimental. One concludes that there is not one "effect" of thyroid administration upon conditioning as indicated in the titles of previous papers, but many "effects" depending upon the extent of the hyperthyroid condition.—C. H. Ammons.

3884. Wike, E. L., & Barrientos, G. Selective learning as a function of differential consummatory activity. *Psychol. Rep.*, 1957, 3, 255-258.—9 thirsty rats were trained in a T-maze and received 5 ml. of water from a small-diameter drinking tube in one goal box and 5 ml. of water from a large-diameter drinking tube in the other goal box. Duration of consummatory activity was greater in the case of the smaller tube. Mean number of turns to the small tube increased significantly as the training progressed. The results were interpreted as supporting Spence's theory of incentive motivation, particularly with respect to the importance of the fractional antedating goal reaction.—C. H. Ammons.

3885. Wickes, Thomas A., Jr. On the relationship of manifest anxiety to learning from colored and non-colored stimuli. *Dissertation Abstr.*, 1957, 17, 2069.—Abstract.

3886. Yule, E. Pratt, & Mott, J. The effects of early stress and differentiated environments during rearing on the learning and problem solving behavior of the albino rat. *J. soc. Res., Pretoria*, 1956, 7, 3-10.—Two groups of albino rats were reared in three differentiated environments and one group of rats was stressed with intense light from the time their eyes were open until adulthood, while the other group was not stressed: (1) no difference in performances on a problem solving and a learning test were found between the stressed and the non-stressed groups of rats; (2) the stressed rats appeared to have adapted to the stress situation; (3) both in the stressed and the non-stressed groups the rats reared under 'free' environmental conditions were superior at problem solving to rats reared under 'very restricted' environmental conditions; (4) the factor of the amount of illumination present during rearing was found to be important in assessing learning performance in a lighted maze situation." Dutch summary. 17 references.—N. De Palma.

3887. Yule, E. Pratt, & Mott, J. The effects of three degrees of home cage illumination during rearing on the maze learning ability of albino rats in a lighted maze. *J. soc. Res., Pretoria*, 1956, 7, 11-17.—Three groups of a homogeneous strain of albino rats were reared under precisely similar home-cage conditions (e.g., space; nutrition) from 23 to 60 days of age. Illumination was varied so that Group I were reared in constant darkness, Group II in constant light and Group III under the conditions ordinarily prevailing in the animal room, i.e., day-night cycle. Rats reared in constant light took significantly more trials to learn a lighted maze with a dark goal-box than rats reared in constant darkness or under ordinary conditions of light-dark. Some possible explanations of the performance of the constant-light group (II) are discussed. . . . Some evidence for the constitutional determination of light-avoidance behavior in rats is reviewed." Dutch summary. 24 references.—N. De Palma.

(See also Abstracts 3505, 3601, 3608, 3980)

THINKING & IMAGINATION

3888. Deterline, W. A. Verbal responses and concept formation. *Psychol. Rep.*, 1957, 3, 372.—200 college Ss were shown large copies of the Heider pictures with instructions to write the first response suggested by each picture. There were 15 stimuli assigned to each of 3 concept classes. Responses were classified as to response concept class. A decrease in frequency of agreement of stimulus and response concept classes from object, to form, to number is consistent with the decreasing ease of rote concept learning. Differences are due to previously learned verbal habits in terms of the most probable response and strengths of competing responses to each stimulus.—C. H. Ammons.

3889. Goldstein, Leo S. The relation of quantity of information to quality of solution of a practical field problem. *Dissertation Abstr.*, 1957, 17, 1806-1807.—Abstract.

3890. Graff, Norman. The relationship of manifest anxiety, ways of handling anxiety, task difficulty, and task evaluation to performance on an intellectual task. *Dissertation Abstr.*, 1957, 17, 1584-1585.—Abstract.

3891. Hafner, A. J. Influence of verbalization on problem solving. *Psychol. Rep.*, 1957, 3, 360.—The present study was an application of the verbal hypothesis (acquisition of a motor skill will be facilitated to the extent that verbal description of the stimulus, the response, or both can be utilized) to a problem-solving situation where verbal cues were added without the elimination of other cues. The results lend only partial support to the verbal hypothesis as applied to a problem solving situation. The addition of verbal cues apparently had a selective facilitating influence in this particular situation.—C. H. Ammons.

3892. Hensley, Horace Gene. A comparative study in problem solving of bright and dull children. *Dissertation Abstr.*, 1957, 17, 1706.—Abstract.

3893. Nadelman, L. Influence of concreteness and accessibility on concept-thinking. *Psychol. Rep.*, 1957, 3, 189-212.—96 bright young adults served as Ss in a study of concreteness and accessibility of concepts which endeavored to check and extend Heider's earlier results. Concreteness and accessibility significantly affected concept-attainment processes, but the effects depended upon the particular score employed and upon the particular concept involved. An interaction was frequently observed depending upon the method of presentation. An object-form-number sequence was not obtained consistently, although some data supported Heider's theory that Ss respond "perceptually" more readily than "intellectually." An explanation of the data is presented.—C. H. Ammons.

3894. de Rascovsky, Matilde W. Imágenes del pecho materno. (Mother's breast images.) *Rev. Psicoanal.*, B. Aires., 1956, 13, 66-69.—A female patients' dreams showed that the image of the moon reflected in the sea are breast images seen with both attributes of roundness and flatness. English, French and German summaries.—M. Knobel.

3895. Springbett, B. M., Dark, J. G., & Clake, J. An approach to the measurement of creative

thinking. *Canad. J. Psychol.*, 1957, 11, 9-20.—With the assumption that creative thinking differs from problem-solving only because it involves a greater sensitivity to unconscious processes, a difficult Lines Test has been developed which involves an interaction between conscious and unconscious processes. Performances on different parts of the test have confirmed predictions. Significant correlations have been obtained with tests of reasoning and intelligence.—R. Davidson.

3896. Tyborowska, Kazimiera. W sprawie roli działania i mowy w myśleniu dzieci przedszkolnych. (On the role of action and speech in thinking of preschool children.) *Studia psychol.*, 1956, 1, 110-126.—The aim of this investigation was the explanation of the role of action and speech in the development of thinking. Experiments, performed on 38 children from 4 to 7 years old, consisted in making by them some simple paper and cardboard toys having seen how the experimenter made them with no explanation or with full explanation of his actions. It appears that speech and action play their role in close mutual relation: practical action improves under the influence of verbal explanation, and verbal utterances improve under the influence of practical action. This fact has its cause in the mutual interdependence of two signal systems.—M. Chojnowski.

3897. Vernon, M. D. Cognitive inference in perceptual activity. *Brit. J. Psychol.*, 1957, 48, 35-47.—"Whenever the sensory data are scanty or ambiguous, or incongruities occur in the perceptual situation, observers tend to employ processes of inferential thinking to arrive at satisfactory identifications." "In making inferences, observers utilize schematically organized knowledge and tendencies to react which they have acquired, either through experiences which are common to everyone as they grow up, or as the result of particular individual experiences and training." "Evidence supporting this thesis is given in examples drawn from everyday life and from experimental investigations." 30 references.—L. E. Thune.

3898. Wiggins, Jack G. Some relationships between stimulus structure and ambiguity in the solution of anagrams. *J. clin. Psychol.*, 1956, 12, 332-337.—2 sets of anagrams each with 2 possible solutions were given in a counterbalanced order to 68 student nurses. The anagrams in the 2 sets were paired for ambiguity of structure; structural ambiguity was measured by the frequency of solution choice in a pilot study. To find if "clues" affected the solution chosen, Ss were given a list of words to learn between the 2 anagram tests; these words were the less frequent solutions for the second set of anagrams. The clues caused a significant shift from frequent to infrequent solutions, but had less effect on shifts from infrequent to frequent solutions. The relation between structural ambiguity and shifts was very significant for frequent to infrequent shifts, non-significant for infrequent to frequent shifts.—L. B. Heathers.

(See also Abstracts 3652, 3982)

INTELLIGENCE

3899. Bayles, Ernest E. Existence, causation, and intelligence. *Educ. Theory*, 1957, 7, 38-43; 79.—To a pragmatist or relativist, reality is "something

which might, should, or does make a difference to someone or something." As to whether there is a cause-and-effect "order" in the universe, a relativist admits he does not know and sees no way of knowing, but he assumes that there is. "I take the ontologically existing world for what it appears to be and on that appearance design my behavior." The test of "truth" is not correspondence with reality but is instead "anticipatory accuracy." "Does the behavior-pattern which my insights lead me to design actually turn out, upon trial, as anticipated?" Within this framework, intelligence is "the capacity to form insights" and wisdom is "possession of, and ability to use, tested or dependable insights."—A. E. Kuenzli.

3900. Bayley, Nancy. **Changing concepts of intelligence: A new look at the curve of intelligence.** In *Proc. 1956 Invitational conference on testing problems*. Princeton: Educational Testing Service, 1956, 11-25.—In the past 30 years the accepted form of the age curve of intelligence has become stabilized. Recently, longitudinal studies have yielded results which do not follow this pattern. These deviations are summarized and discussed.—R. L. McCornack.

3901. Cabrer, Sebastián M. **La evaluación de los talentos especiales.** (The evaluation of special talents.) *Pedagogía, Rio Piedras*, 1957, 5(1), 95-112.—The evaluation of those talents not related with general intelligence is considered. The difficulties inherent in the evaluation of abilities such as mechanical aptitude, musical talent, drawing, etc., are briefly discussed. Techniques employed at present to evaluate these talents are described.—E. Sánchez-Hidalgo.

3902. Geyer, Horst. **Om dumheten.** (On stupidity.) Stockholm, Sweden: Natur och Kultur, 1956. 242 p. 16.00 Kr.—This book, translated by Assar Askar from the German original, *Über die Dummheit* (Göttingen: Musterschmidt Verlag, 1954), deals with human stupidity from medical, psychological, and sociological points of view. It consists of three parts: (1) Stupid behavior caused by too low intelligence (What is understood by too low intelligence? What is stupidity and what may be done about it? Prophylactic measures or stupidization on a large scale?); (2) Stupid behavior in spite of normal intelligence (Affective disturbance of intelligence; humanity's stupid ways of behaving); (3) Stupid behavior caused by high intelligence (Praise of stupidity, Stupidity and character, Advantages of stupidity). 55-item bibliography.—M. Choynowski.

3903. Harrell, Ruth F., Woodyard, Ella R., & Gates, Arthur I. **The influence of vitamin supplementation of the diets of pregnant and lactating women on the intelligence of their offspring.** *Metabolism*, 1956, 5, 555-561.—"The mean intelligence, determined by conventional testing methods at ages 3 and 4 years, in children born of 612 women in Norfolk, Virginia, was significantly higher in those whose mothers had received vitamin supplements during the latter part of pregnancy than in those whose mothers received an inert control tablet. No significant differences were demonstrated in a similar study among Kentucky mountain women, where the usual and unsupplemented diet was found to be more nearly adequate than that used in the Norfolk homes."—J. Brožek.

3904. Knief, Lotus Mae. **An investigation of the cultural bias issue in intelligence testing.** *Dissertation Abstr.*, 1957, 17, 1951.—Abstract.

3905. Lehmann, Irvin Jack. **Rural-urban differences in intelligence.** *Dissertation Abstr.*, 1957, 17, 1937-1938.—Abstract.

3906. Piltz, Robert Joe. **Problems in validity for the Coppel Sentence Completion Test as a measure of "effective intelligence" with Air Force personnel.** *Dissertation Abstr.*, 1957, 17, 1814-1815.—Abstract.

3907. Shuey, Audrey M. **The testing of Negro intelligence.** Lynchburg, Va.: Bell, 1958. xv, 351 p. \$4.00.—Summarizing studies of Negro-white differences in mental test performances for the past 40 years, the 9 chapters deal with the following specific areas: young children, school children, high school and college students, the armed forces, deviates, delinquents and criminals, racial hybrids, and selective migration. In a summary chapter the author finds that regardless of geographical environment, education, biased sampling favoring the Negro, type of test used (verbal or non-verbal); "all point to the presence of some native differences between Negroes and whites as determined by intelligence tests." 319 references.—C. K. Bishop.

3908. Thurstone, Thelma G. **Changing concepts of intelligence: Implications for test construction.** In *Proc. 1956 Invitational Conference on testing problems*. Princeton: Educational Testing Service, 1956, 26-37.—The findings of several studies on the growth of the separate mental abilities are reported and some suggestions for their application in test construction are made. Factorial invariance with age, long range predictions, and differential growth rates are particularly mentioned.—R. L. McCornack.

3909. Thurstone, Thelma Gwinn. **The Tests of Primary Mental Abilities.** *Personn. Guid. J.*, 1957, 35, 569-578.—This article is another in the series dealing with tests of multiple factors. The article describes the factorial study of human abilities on which the tests are based, and presents data regarding norms, reliability and validity for the present battery which is called the "SRA Tests of Primary Mental Abilities."—G. S. Spear.

(See also Abstracts 3583, 3650, 4015, 4080, 4189, 4629)

PERSONALITY

3910. Ackerman, Nathan W. **A changing conception of personality: A personal viewpoint.** *Amer. J. Psychoanal.*, 1957, 17, 78-86.—"It does seem likely that further progress in the understanding of mental illness and mental health will be possible if we try now to conceptualize the phenomena of unconscious conflict and symptom formation in the broader frame of a definition of the patterns of total personality and corresponding modes of social adaptation. Necessarily, this entails an extension of the dimensions of personality to include the dynamic link between individual and group, intrapsychic processes and interpersonal relations, and an explicit formulation of the processes of role adaptation."—D. Prager.

3911. Adelson, Daniel. **Attitudes toward first names: An investigation of the relation between self-acceptance, self-identity and group and in-**

dividual attitudes toward first names. *Dissertation Abstr.*, 1957, 17, 1831.—Abstract.

3912. Aronson, Leonard. Self-distortion and distortion of others. *Dissertation Abstr.*, 1957, 17, 1590-1591.—Abstract.

3913. Blaise, Eduardo. Inhibición de la expresión projective de la agresión. Regresión. Obesidad. Análisis de la fantasía básica. (Inhibition of the projective expression of aggression. Regression. Obesity. Analysis of the basic fantasy.) *Rev. Psicoanal.*, B. Aires, 1956, 13, 53-57.—Extremely repressive superego figure obliged the patient presented in this paper to an oral level of his personality. The projective expression of aggression is substituted by an introjective one. English, French and German summaries.—M. Knobel.

3914. Branson, Bernard David. An investigation of manifest anxiety and the role of discrimination in self-ideal discrepancy and complex tasks. *Dissertation Abstr.*, 1957, 17, 2063.—Abstract.

3915. Brophy, Alfred Laurence. Self, role, and satisfaction. *Dissertation Abstr.*, 1957, 17, 1616.—Abstract.

3916. Calogeras, Roy Cuno. Some relationships between fantasy and self-report behavior. *Dissertation Abstr.*, 1957, 17, 1591-1592.—Abstract.

3917. Carroll, John B., & Levin, Harry. A method for determining the polarity of behavior items. *Child Developm.*, 1956, 27, 427-438.—Describes a procedure for objectively determining the scoring of bipolar behavior items (love-hate, masculinity-femininity, etc.) when no external criterion is available. The method is applicable when the behavior items are postulated to have in common some relevance to a certain bipolar trait, and where the investigator wishes to place each item in a position on this continuum. A basic assumption of the method is that there is a single common dimension underlying all or most of the items and that the total pool of items used in the computations gives the best basis for establishing that dimension.—F. Costin.

3918. Cattell, Raymond B. Personality and motivation structure and measurement. New York: World Book Co., 1957. xxvi, 950 p. \$9.25.—The factoring stage of personality research spans great areas of data, requires personnel with uninterrupted energy, unusual kinds of mathematical and clinical experience and inventiveness, and with resources for handling many variables. These conditions limit the number of researchers in the area. Furthermore, they limit the opportunity to make a full progress report. Recent findings concerning personality factor patterns, however, make this time an appropriate one for stock-taking and the present book is such a report. Topics covered include: I. Basic principles—theory and measurement research, calculation methods and concepts, and media of observation. II. Present knowledge—primary data concerning various source traits. III. Formal models and integration of structured measurement—properties and interactions of source traits, validity of personality dimensions, complex functions in personality and cultural interaction. IV. Measurement of attitudes, motivation, conflict adjustment—principles of measurement, dynamic structure, dynamic calculus of conflict. V. Personality change—personality changes through life, measuring special stats. VI. Resultant new test techniques—

in clinical, educational, and industrial psychology. Supportive materials, a glossary, and a bibliography of 661 titles are appended.—M. O. Wilson.

3919. Cesio, Fidias R. El individuo y la sociedad: An estudio psicoanalítico. (The individual and society: A psychoanalytical study.) *Rev. Psicoanal.*, B. Aires, 1956, 13, 41-52.—A defective education "thrust" knowledge into the personality creating an artificial structure: the "social ego," which thwarts the "individual ego" in its development. English, French and German summaries.—M. Knobel.

3920. Cloet, L. Karakteraspekten. (Aspects of character.) *Tijdschr. Studie- Beroepsoriënt.*, 1957, 4, 49-52.—The author gives a survey of the means the psychologist uses to discover the character of subjects. He distinguishes between ordinary cases and problem cases. For the latter, he believes that more importance is to be given to etiology and circumstantial factors than to the symptoms themselves. French summary.—R. Piret.

3921. Cornet, R. K. La typologie dans l'antiquité et au moyen âge. (Typology in classical times and in the Middle Ages.) *Nouv. Rev. pédag.*, 1957, 12, 528-539.—The historical origins of typology should be in Greek mythology, but Hippocrates and Galen are the true precursors of our present systems of typology.—R. Piret.

3922. Crandall, Vaughn J. Some problems of personality development research. *Child Developm.*, 1956, 27 (2, Suppl.), 197-203.—Research in personality development needs further growth in the employment of specific theoretical questions and less emphasis on the empirical use of existing assessment methods. A closer relationship between the development of assessment techniques and theoretical frameworks suitable for research in personality development is also needed.—L. S. Baker.

3923. Dager, Edward Zicca. Social factors in personality change. *Dissertation Abstr.*, 1957, 17, 1619.—Abstract.

3924. Diers, Helen A. Factors in the understanding of others. *Dissertation Abstr.*, 1957, 17, 1594.—Abstract.

3925. Emery, Paul E., & Roth, Bernard. Remarks on narcissistic identification. *Psychiat. Quart. Suppl.*, 1956, 30, 241-256.—Narcissism evolves chiefly from identificatory relationships as suggested by Freud and Klein. In primary narcissism the basic elements are the life and death instincts. In secondary narcissism the basic elements are the self as subject and the self as object. Primary and secondary narcissism are contiguous in the personality. Social, mature adaptation is viewed as the outcome of compatible, secondary identifications with abandoned parental and substitute figures. Identificatory relationships are dependent upon narcissistic evaluation of the self and objects.—D. Prager.

3926. Fisher, Seymour, & Cleveland, Sidney, E. Body image and personality. Princeton, N. J.: Van Nostrand, 1958. xi, 420 p. \$9.25.—The purpose of the book was to review previous thought and research on the subject and describe the authors' own formulations and their program of investigation regarding the phenomenon. One phase of the research was one of which were found by use mainly of projective methods with body image boundaries, the dimensions

terial to be Barrier and Penetration of Boundary. The second phase of the research dealt with B-I boundaries and behavior variations. The third phase concerned development of boundaries. The fourth phase related to boundary and body reactivity. The book is concluded with a group of theoretical formulations. A set of illustrative Rorschach protocols and a bibliography of 361 titles are appended.—M. O. Wilson.

3927. Friedrichs, Robert Winslow. An exploratory study of altruism. *Dissertation Abstr.*, 1957, 17, 1832.—Abstract.

3928. Grace, Harry A. Personality impressions of personality: An experimental critique. *Proc. Iowa Acad. Sci.*, 1956, 63, 553-555.—The author sets up two criteria which must be met in the experimental procedure before group differences in response to stimuli can be attributed to differences in perception, in studies similar to Asch's "warm-cold" experiment. Evidence is reported indicating that Asch's study did not meet these criteria, and so its conclusions are questioned.—C. F. Haner.

3929. Hugenholtz, P. Th. Binding en verstandhouding. (Fixation and understanding.) *Ned. Tijdschr. Psychol.*, 1957, 12, 1-23.—An anthropological study of fixation and understanding in human relations. On the basis of the principal structural difference between the vital and the humane, fixation is described as man's search for satisfaction of his needs and safeguarding of his vital interests, whereas understanding implies a voluntary unfolding of the self in the approximation of the essentially different other person. Some implications for psychotherapy based on this point of view are pointed out.—R. H. Houwink.

3930. Humphreys, Lloyd G. Characteristics of type concepts with special reference to Sheldon's typology. *Psychol. Bull.*, 1957, 54, 218-228.—This paper describes the several limitations of Sheldon's physical and temperamental types and the relationship between the two. "In place of a priori complex types, the use of the multiple discriminant function is recommended for problems traditionally associated with typing."—W. J. Meyer.

3931. Jensen, Arthur R. Personality. *Annu. Rev. Psychol.*, 1958, 9, 295-322.—This review to April 1957 includes a 93-item bibliography.—A. J. Sprow.

3932. Jones, Lyle V., & Morris, Charles. Relations of temperament to the choice of values. *J. abnorm. soc. Psychol.*, 1956, 53, 345-349.—The hypothesis that the expressed value system of an individual is related to his temperament was tested. The value system was determined from response to the Ways to Live document, and temperament was measured by the Thurstone Temperament Schedule. The Ss consisted of 250 male college students of ages 20 or 21 from colleges throughout the U.S. "The results of this study strongly suggest substantial relationships between the domain of temperament and that of value, especially for values represented by Factors B and C, Enjoyment and Progress in Action, and Withdrawal and Self-Sufficiency. Relations are less marked between temperament areas and value Factor D, Receptivity. . . ."—A. S. Tamkin.

3933. Kellermann, R. I. Themata in de zelfbeoordeling. (Themes in self-judgment.) *Ned. Tijdschr. Psychol.*, 1957, 12, 215-230.—An experimental study of the influence of self-conceptualization upon behavior.—R. H. Houwink.

3934. Kouwer, B. J., & Van der Werff, J. J. Temperamentele beoordelingscategorien: Een factoranalytisch onderzoek. (Temperamental categories of judgment: A factor-analytical study.) *Ned. Tijdschr. Psychol.*, 1957, 12, 159-171.—In an effort to find an interpretation of classical psychological typologies, which would be acceptable in modern theory, and could be explained in terms of a rationalization of affective dimensions in behavior impressions, Q-sort judgments on a list of 120 statements taken from the works of Ewald, Heymans, Jaensch, Kretschmer and Pfahler, were factoranalyzed. The four main factors found were: (1) sympathy-factor; (2) manifest emotionality; (3) sthenic, vital energy; (4) secondary vs. primary function. It was found possible to reinterpret these factors as "fundamental dimensions of the affective frame of reference, structuring our impressions of the behavior of others in its dynamical aspect," in terms of expansivity, intensity and temporal continuity. The authors conclude, that "such an interpretation of the temperamental types is possible and usable in the analysis of actual personality judgments."—R. H. Houwink.

3935. Krugman, Morris. Changing methods of appraising personality. In *Proc. 1956 Invitational conference on testing problems*, Princeton: Educational Testing Service, 1956, 48-57.—The development of methods of appraising personality over the past 30 years is traced. In spite of extensive experimentation with a vast array of instruments we do not now have instruments that are generally acceptable to psychologists. We are emerging from the empirical stage and are coming closer to the use of current theory and knowledge.—R. L. McCornack.

3936. Kuba, Tadatoshi. Ishi-kishitsu kensa no yōin bunseki-teki kenkyū. (A factor-analytical study on the Will-Temperament Test.) *Jap. J. educ. Psychol.*, 1956, 3, 169-175.—A 5-year longitudinal study was made on will-temperament which is considered as the organization of personality. In 10 to 11 years old, factors related to thinking were dominant while no definite tendency was observed between 12 and 14 years old. Considerable shift in dominant factors was found in most of Ss. English summary, p. 187.—S. Ohwaki.

3937. Melniker, Robert C. Self-acceptance and the mechanism of identification: A Q-sort investigation of the relationship between levels of self-acceptance, character, parental descriptions and identification patterns in college women. *Dissertation Abstr.*, 1957, 17, 1812-1813.—Abstract.

3938. Murphy, Gardner. Concepts of personality—then and now. In *Proc. 1956 Invitational conference on testing problems*, Princeton: Educational Testing Service, 1956, 41-47.—The modern era in thinking about personality began with the concepts and methods of Francis Galton. These concepts, while still useful, have to compete with newer ways of thinking. Some of the major new conceptual systems of the last fifty years are discussed.—R. L. McCornack.

3939. Murphy, William F. A note on the significance of names. *Psychoanal. Quart.*, 1957, 26,

91-106.—"The significance of names in the organization of the ego defense patterns is discussed and illustrated. Given names, surnames, nicknames, and assumed names have numerous importance significances in the development of individuals, and often give clues to their attitudes toward themselves and others with whom they have been closely associated. In some instances they appear to have an initially pathogenic influence."—L. N. Solomon.

3940. Newman, David Keith. A study of factors leading to change within the personal construct system. *Dissertation Abstr.*, 1957, 17, 1597-1598.—Abstract.

3941. Paul, I. H. Impressions of personality, authoritarianism, and the fait accompli effect. *J. abnorm. soc. Psychol.*, 1956, 53, 338-344.—"Ratings of the personalities of Eisenhower and Stevenson were obtained from authoritarian and equalitarian Ss 1 week before the 1952 election and again several weeks after the election. When these ratings are judged with respect to attractiveness or favorableness, the findings show a greater postelection change in a favorable direction for Eisenhower. . . . However, differential favorable change was greatest among those who had endorsed the loser. The greatest differential increase occurred regularly for the trait-class leadership strength. 19 references.—A. S. Tamkin.

3942. Remits, Ernest L. The feeling of superiority and anxiety-superior: The Ottawa Trial Survey On Personality. Ottawa, Canada: Runge Press, 1957. 82 p.—This is a continuation of 2 previous studies by the same author. Using a schedule consisting of 12 questions, the author, through interviews, has explored anxiety which he believes results when the subject's sense of superiority and mastery is threatened by persons or situations. Through the study of competition and personality, situations of superiority, learning and change and reactions to fictitious superiority, all reflected in interviewee's responses, the author draws 12 conclusions all of which reflect, in one form or another, the fact that persons, groups and institutions promote or hinder the expression of individual superiority and therefore contribute to the expansion or desiccation of the potentialities of the human person. The approach throughout is more biological than psychological, the author tending to be highly critical of traditional, psychological theories of personality.—H. Winthrop.

3943. Rokeach, Milton, & Fruchter, Benjamin. A factorial study of dogmatism and related concepts. *J. abnorm. soc. Psychol.*, 1956, 53, 356-360.—Using scales of 10 personality variables, 3 hypotheses were tested: (1) dogmatism is factorially discriminable from authoritarianism, ethnocentrism, and rigidity; (2) dogmatism, paranoia, and self-rejection are factorially similar; and (3) dogmatism, paranoia, and self-rejection would emerge, together with anxiety, on a single factor. Ss were 207 New York college students. The data permit the conclusion that these 3 hypotheses are confirmed.—A. S. Tamkin.

3944. Rushlau, Perry Joseph, Jr., An experimental study of ambiguity tolerance as a trait. *Dissertation Abstr.*, 1957, 17, 2067.—Abstract.

3945. Schlegel, Leonhard. "Syntonie" und "Dystonie," besonders im Vergleich zu den Begriffen

der Zykloidie und Schizoidie. (Syntonie and dystonia, especially in comparison with the concepts of cyclothymia and schizothymia.) *Schweiz. Z. Psychol. Anwend.*, 1957, 16, 277-280.—The concepts of dystonia and syntonie are contrasted with those of schizothymia and cyclothymia. Even though the term schizophrénie and schizothymia have the same root-term, dystonia is almost identical with schizothymia but not necessarily with schizophrénie. Syntonie is the essential characteristic of cyclothymia; however, the cyclic factor by itself does not represent the conceptual opposite of schizothymia or dystonia. Syntonie is illustrated by examples of normal characters, neuroses and psychoses. English and French summaries.—J. W. House.

3946. Sharma, Sohan Lal. Some personality correlates of changes in self-esteem under conditions of stress and support. *J. Educ. & Psychol.*, Baroda, 1956, 14, 154-165.—Control, stress, and support groups of psychology students, with 15, 23, and 12 persons in each group, were used to investigate variations in self-esteem and some personality variables. All were given 4 tests, Self-esteem, Rosenzweig PF, Guilford Martin, and TAT. The stress group was then given impossible problems while the support group received easy problems. All subjects then repeated the Self-esteem Test. Subjects in the stress and support groups had significantly different scores than those of the control group. Those whose self-esteem scores changed under stress were found to have exhibited different personality characteristics in the pretests than those who changed in the supporting situation. 24 references.—D. Lebo.

3947. Shlien, John M. Creativity and psychological health. *Amer. Mgmt. Ass., Person. Ser.*, 1956, No. 168, 12-21.—A group of characteristics of the creative person are proposed—he exercises choice, taste and discernment, he does not depend upon retrospective logic, he exceeds the obvious boundaries of a problem, he is likely to have a history of creative experience, he is willing to be different. The notions that deprivation, neurosis or necessity will force creative effort are denied. A comparison of the effect of counseling on scores on a measure of self-esteem (thought of as a condition underlying the state of autonomy that leads to creative behavior) with the scores of "normal" and "in need of counseling" control groups suggests that even brief counseling results in increased self-esteem.—P. Ash.

3948. Waisanen, Carl E. Preference aspects of self-attitudes. *Dissertation Abstr.*, 1957, 17, 2079.—Abstract.

3949. Wheelis, Allen. The quest for identity. New York: Norton, 1958. 250 p. \$3.95.—The book is an analysis of modern man's changing character, the loss of old identities as well as the search for new ones. Examined also is the relevance of psychoanalysis to this quest. Interwoven are fictional narratives highlighting cultural and ideological changes in contemporary American society. A chapter entitled "The vocational hazards of psychoanalysis" deals with the personal struggles of the analyst in his daily work.—H. H. Strupp.

(See also Abstracts 3492, 3640, 3748, 3816, 3987, 3992, 4054, 4122, 4129, 4160, 4309, 4690)

AESTHETICS

3950. Asthana, Bipin C. Individual difference in aesthetic appreciation. *Educ. & Psychol., Delhi*, 1956, 3(1), 22-26.—Reported is a psychometric design for assessing aesthetic appreciation quantitatively. A preliminary study with a mixed group of 64 graduate students revealed that concepts "pleasingness" and "beauty" are not regarded as identical and the sex differences in esthetic appreciation were non-existent.—H. Angelino.

3951. Dickinson, George Sherman. Aesthetic pace in music. *J. Aesthet.*, 1957, 15, 311-321.—Aesthetic pace is defined as follows: "Through the manipulation of the tensities of musical motion, a distinctive quality is conferred upon the pattern, which gives the impression of progression, and imparts individuality to the current of lyrico-dramatic expression."—P. R. Farnsworth.

3952. Dorfles, Gillo. Communication and symbol in the work of art. *J. Aesthet.*, 1957, 15, 289-297.—In order to be understood most art must be learned. In art a linguistic factor coexists with a nonlinguistic one. The using up of the communicative power is due particularly to the linguistic factor. The psychoanalytic concept of sublimation in art is confused and mistaken.—P. R. Farnsworth.

3953. Dracoulides, N. N. Tracé psychanalytique sur "Hamlet" de Shakespeare. (Psychoanalytical outline on Shakespeare's "Hamlet.") *Psyché, Paris*, 1956, 11, 129-155.—Hamlet was written after Shakespeare father's death and also after being betrayed by the woman he loved, which caused a re-experience of the Oedipal deception. Hamlet's words directed to Ophelia and to Gertrude represent the poet's feelings toward his mother and toward his beloved.—M. Knobel.

3954. Dührssen, A. Lebensproblem und Daseinskrisen bei Hamlet und Ophelia. (Life problem and existential crisis of Hamlet and Ophelia.) *Z. Psycho-som. Med.*, 1956, 2, 220-235.—In this first part of a study, the problems of Ophelia; her disturbed relationship to father, brother, the absent mother, the Queen, and Hamlet; and the following psychosis are analyzed.—E. Katz.

3955. Feldman, A. Bronson. Zola and the riddle of sadism. *Amer. Imago*, 1956, 13, 415-425.—Zola's "The Human Beast" (1890) was one of the first novels to exploit the symbolism of the locomotive. Its protagonist, Jacques Lantier, is driven to his doom by a lust for murder based upon "the wish to retaliate against the maternal menace of castration, revenge for maternal 'infidelity,' and . . . the rage of the mouth thwarted child." There are likenesses between Emile Zola and Jacques Lantier.—W. A. Varvel.

3956. Goitein, Lionel. Green pastures: Psalm XXIII. *Amer. Imago*, 1956, 13, 409-414.—An analytic interpretation of the Twenty-Third Psalm finds its appeal to lie in its simple, symbolic equation ". . . the unquestioning acceptance of, and masochistic return to, the pre-genital mother. All its evocative symbolism is oral nutritional, and tells of oral dependency." Its 15 compelling images are summarized.—W. A. Varvel.

3957. Götlind, Erik. The appreciation of poetry: A proposal of certain empirical inquiries.

J. Aesthet., 1957, 15, 322-330.—The catalogue of important factors in the appreciation of poetry includes the ability: to experience rhythm, to exploit speech sounds, to properly couple phenomena from two different sensory fields, to associate ideas speedily, to associate on the basis of slight cues, to keep many different ideas present at the same time, and to perform with high emotional mobility. There are also less important factors.—P. R. Farnsworth.

3958. Hungerland, Helmut. The aesthetic response reconsidered. *J. Aesthet.*, 1957, 16, 32-43.—The author suggests a principle which he believes to be operative in at least part of the area of visual art. "It would be in keeping with [the] principle of homeostasis to interpret the aesthetic response as an organism's attempt to abolish tensions which are intentionally established. In the process of aesthetic contemplation these tensions are deliberately extended."—P. R. Farnsworth.

3959. Laver, James. The psychology of fashion. *Bull. Brit. psychol. Soc.*, 1957, 31, 45.—Abstract.

3960. Milner, Marion. On not being able to paint. (2nd ed.) New York: International Univer. Press, 1957. xxii, 184 p. \$4.50.—Painting is most satisfying when it is an expression of inner, usually undefined, urges. The creative process is similar, in this respect, to perception. In both there is an interchange of internal and external stimuli. The 4 parts of the book elucidating this theme are devoted to the emergence, content, method, and use of free drawings.—G. Elias.

3961. Racker, Enrique. "Laventina indiscreta": Glosas psicoanalíticas sobre una película. ("Rear Window": Psychoanalytical commentary on a film.) *Rev. Psicoanal., B. Aires*, 1956, 13, 58-65.—Fixation on the primary scene and Oedipal complex are seen as the permanent theme that conflicts the movie hero in his different situations throughout the whole drama. English, French, and German summaries.—M. Knobel.

3962. Rogers, Robert. The beast in Henry James. *Amer. Imago*, 1956, 13, 427-454.—This paper is an "effort to highlight the neurotic patterns which Henry James wove into the fabric of his art by making a close textual analysis—with emphasis on theme and imagery—of what for our purpose is one of the key stories James wrote: 'The Jolly Corner.' Like 'The Beast in the Jungle' it is "a tragic lament for a life unlived, for deeds undone." For James "the beast was an archetypal figure." His heroes "are incarnations of the passive, powerless Futile Man—the antithesis of Prometheus." 20 references.—W. A. Varvel.

3963. Rudner, Richard. Some problems of non-semiotic aesthetic theories. *J. Aesthet.*, 1957, 15, 298-310.—A study of the difficulties for which any adequate non-semiotic theory would have to account. These are: the fact that literature is an art, the fact that symbolism is an art genre, and the fact "that 'expressive' and its cognates seem to be eminently sensible aesthetic epithets to employ in discourse about aesthetic objects."—P. R. Farnsworth.

3964. Schnier, Jacques. The function and origin of form. *J. Aesthet.*, 1957, 16, 66-75.—The "restitution" theory of art, featured by Melanie Klein, is here developed and extensively illustrated.—P. R. Farnsworth.

3965. Wasserstrom, William. *The spirit of Myrra*. *Amer. Imago*, 1956, 13, 455-472.—"During the age of gentility the most popular person in our society and in our fiction was the American girl. . . . What distinguished her was a certain unique combination of sex and innocence [resulting from] a girl's special affection for her father, his profound interest in her." Many of our most distinguished women were especially favored by their fathers—Theodosia Barr, Kate Chase Sprague, and Marion Hooper (Mrs. Henry Adams) are tragic examples. In fiction, Aldrich's "Majorie Daw," Garland's "Rose of Dutcher's Cooly," Frederic's "The Damnation of Theron Ware," James' "The Golden Bowl," and Howells' "A Modern Instance" are concerned with the American girl and the sources of her complexities.—*W. A. Varvel*.

3966. Webster, Peter Dow. Franz Kafka's "In the penal colony": A psychoanalytic interpretation. *Amer. Imago*, 1956, 13, 399-407.—"In the Penal Colony' contains all the familiar symbolic action of a nightmare and Kafka's artistic solution of his lifelong intrapsychic conflict. The offending soldier is the instinctual self within the psyche, the executing officer is the duplicate of the former commandant or primary superego, and the explorer is the conscious ego of the artist. The torture machine is the mechanical equivalent of the devouring mother created by the oral sadism of the culprit. The new commandant and the ladies are the symbolic representatives of mature experience challenging the residual infantilism in the personality of the artist-hero."—*W. V. Varvel*.

(See also Abstracts 3996, 4029, 4115, 4391)

DEVELOPMENTAL PSYCHOLOGY

3967. Gollin, Eugene S. Some research problems for developmental psychology. *Child Development*, 1956, 27 (2, Suppl.), 223-235.—An evaluation of current research in developmental psychology is offered, together with some suggestions for "integrating developmental, general, and clinical psychological problems within an experimental framework." 50-item bibliography.—*L. S. Baker*.

3968. Marcozzi, Vittorio. *Correlazione fra alcune caratteri fisici e psichici in gemelli simili e dissimili*. (Correlation of certain physical and psychic characteristics in similar and dissimilar twins.) *Acta. genet. med. gemellolog.*, 1957, 6, 459-481.—In a study of physical and psychological resemblances between 2 groups of similar and dissimilar twins the findings indicate marked resemblance in the measurement and indexes of the head and the face of similar twins and notable differences with those of dissimilar twins. With regard to many of the psychological characteristics studied (these include visual memory, color preference, mental level and concordance in mistakes) no notable difference was found. "The auditory memory (weak) and the index of attention (very high) betray, however, notable differences." A correlation is also noted between physical resemblance and the index of attention. 92-item bibliography. English and French summaries.—*D. A. Santora*.

3969. Nowogrodzki, Tadeusz. *Psychologia rozwojowa*. (Developmental psychology.) (4th ed.)

Warszawa, Poland: Państwowe Zakłady Wydawnictw Szkolnych, 1956, 195 p. 4.45 Zł.—This is an elementary textbook of developmental psychology for teachers, written from the Pavlovian point of view. 6 chapters are devoted to the development of child's mental life in the light of Pavlov's teaching, to the notion and factors of mental development, and successively to the periods of early childhood, preschool age, school age, adolescence (14-18) and yearly maturity (18-25). 32-item bibliography of Polish and Russian works.—*M. Chojnowski*.

3970. Sears, Pauline Snedden. *Developmental psychology*. *Annu. Rev. Psychol.*, 1958, 9, 119-156.—This review covers the period from April 1956 to April 1957. 156-item bibliography.—*A. J. Sprow*.

3971. Wright, Herbert F. *Psychological development in midwest*. *Child Development*, 1956, 27 (2, Suppl.), 265-286.—An approach using methods derived from biological ecology is applied to the study of the psychological growth of persons in the community of Midwest. ". . . Ecologists have had to adopt standard units of description, such as grazing ranges, behavior cycles. . . . This need we have tried to meet by choosing as descriptive units behavior settings and episodes. Our first claim for these targets of a psychological ecology would be that description in their terms can take into account both psychological events and conditions under which these same events occur for the reason that each target is a unit of behavior and its context."—*L. S. Baker*.

(See also Abstracts 3459, 4340)

CHILDHOOD & ADOLESCENCE

3972. Ambrose, J. A. *The changing responsiveness of infants to the presence of an adult*. *Bull. Brit. psychol. Soc.*, 1957, 32 (Inset) 8.—Abstract.

3973. Anderson, John E. *Child development: An historical perspective*. *Child Development*, 1956, 27 (2, Suppl.), 181-196.—"In my summary of the developing content within the field I have used three approaches: first, quantitative estimates of the growth of the scientific literature; second, an analysis of our different approaches to the model of the ongoing manifold changing in time which we know as the growing human being; and, third, a brief summary of developments in content and methods by areas in the past three decades."—*L. S. Baker*.

3974. Arnon, Yosef. *Hanoar bakefar haangli*. (Youth in the English village.) *Ofakim*, 1957, 11, 25-37.—A short visit in some English villages is described, in order to learn the life of the children and adolescents on their socio-economic background. Apart from observation and interviews, questionnaires were administered and an essay was written ("The village and the town"). The following topics are discussed: The village, its external view, church and school, school and children, extra-school activities, sport, views of children for and against life in village, respectively in town.—*H. Ormian*.

3975. Barker, Elizabeth Dunning. *The perception of sexual symbolism*. *Dissertation Abstr.*, 1957, 17, 1591.—Abstract.

3976. Bijou, S. W. *Methodology for an experimental analysis of child behavior*. *Psychol. Rep.*, 1957, 3, 243-250.—A detailed account is given of a methodology for a systematic approach to an experi-

mental analysis of child behavior. The apparatus consists of a lever as the manipulandum, a universal-type dispenser, a depository, and two standard toys. An adult performs a care-taking function, sits behind a screen, and E operates the control panel and takes notes in an observation room. Experimental procedures reduce to a minimum the interaction between the adult and the child. Examples of the data obtained are presented and briefly discussed.—C. H. Ammons.

3977. Bornemann, Ernst. *Jugendprobleme unserer Zeit*. (Contemporary problems of youth.) Göttingen, Germany: Hogrefe, Verlag für Psychologie, 1958. 30 p.—Today's young people are analyzed in terms of changes in family life, occupations, politics, and accelerated tempo. 9 adjustment areas are surveyed and youth's prospects are appraised.—R. Tyson.

3978. Bowman, Paul H., DeHaan, Robert F., Kough, John K., & Liddle, Gordon P. *Mobilizing community resources for youth: Identification and treatment of maladjusted, delinquent, and gifted children*. *Suppl. educ. Monogr.*, 1956, No. 85. viii, 138 p.—The 3rd of a series of reports on a 10-year program which has now run for 4 years. The procedure has been to screen 3 groups of children in the community: the gifted, the aggressively maladjusted who are vulnerable to delinquency, the withdrawn who are vulnerable to emotional disturbance. The screening methods and instruments, the characteristics of those who have been screened, the programs of assistance and treatment, and the consultant role of the staff from outside the community are described. Eventually the program is to be turned over to the community.—M. Murphy.

3979. Clifford, Edward. *Discipline in the home: A controlled observational study of parental practices*. *Dissertation Abstr.*, 1957, 17, 2055-2056.—Abstract.

3980. Collette, A. *Le père et le premier souvenir d'enfance*. (The father and earliest childhood memory.) *Cah. Pédag.*, 1957, 16, 111-126.—Children's earliest memory of the father never goes back earlier than the age of 3, and it is often unpleasant. To the idea of the father the associated idea is one of disagreeableness, painful events, punishment, etc. However, to that image thereafter corresponds a paternal attitude of collaboration, protection, or frustration.—R. Piret.

3981. Crabtree, Margaret Cooper. *The construction and trial study of a language development test for children up to three years of age*. *Dissertation Abstr.*, 1957, 17, 1713.—Abstract.

3982. Czapanis, Jozefa. *Rola słowa (wychowawczy i dziecka) w rozmaitych zajęciach przedszkolnych*. (The role of the word [teacher's and child's] in various pre-school activities.) *Zes. Nauk. Univ. A. Mickiewicza Fil., Psychol., Pedag.*, 1956, 1, 79-81.—This is a short report on the investigations carried on by the author and concerning the role of speech as an instrument of the development of children's thought in different pre-school activities.—M. Chojnowski.

3983. Däumling, Adolf. *Über das Prolepsis-Symptom bei Adoleszenten*. (The prolepsis-symptom in adolescents.) *Jb. Psychol. Psychother.*, 1956,

4, 255-262.—The attempt to elide necessary stages of development by the premature assumption of particular personality characteristics involves ramified disturbance. Cases of three adolescents are presented, showing some effects of such proleptic formations: impatience with securing the means to a particular end, acquisition of personally inappropriate characteristics from ideal figures, and pervasive self-alienation. The prolepsis symptom in an adolescent is a warning signal of developmental disturbance.—E. W. Eng.

3984. D'espallier, V. *Bijdrage tot de psychologie van het enige kind*. (A contribution to the psychology of the only child.) Antwerp, Belgium: Standaard-Boekhandel, 1957. 142 p.—This book contains a methodological introduction and 4 studies of only children: (1) by means of an examination of the files of a medico-psychological clinic; (2) by means of the Bernreuter Personality Inventory; (3) by means of the Rorschach test; and (4) by means of a sociometric study. The main conclusion is that being an only child influences behavior but that there is not an only-child personality pattern. Each one reacts to his isolation according to his sex, his heredity, his character, his environment, etc. An 8-page French summary.—R. Piret.

3985. Dierkens, J. *Les problèmes sexuels posés par l'adolescence*. (Sexual problems posed by adolescence.) *Rev. belg. Psychol. Pédag.*, 1957, 19, 14-18.—The more dangerous sexual problems for the adolescent are some of the problems of unsatisfied curiosity, of poorly understood taboos, of attitudes of withdrawal from sexual life, or else of overcompensation. The only remedy is an intelligent and frank sexual education.—R. Piret.

3986. Dzierżanka, Anna. *O rozwoju umiejętności posługiwania się narzędziami i przedmiotami codziennego użytku przez dzieci w wieku przedszkolnym*. (On the development of the skill to use tools and objects of everyday use in children of preschool age.) *Studia pedag.*, 1955, 2, 149-182.—The aim of this work was to establish: (1) development of the technique of using tools and objects of everyday use in children from 2 to 7 years old; and (2) average achievements of preschool children in various stages of development. The author investigated 90 children each of whom had to perform 10 various tasks 10 times in succeeding days. All movements, actions and utterances of children were protocolled in detail. The author gives her results in tables showing the percentage of various successful stages of solving the tasks on all 6 age levels, analyses her data and illustrates them with drawings and photographs. The children were also filmed. The work has been done and results are interpreted in the Pavlovian frame of reference.—M. Chojnowski.

3987. Engel, Mary. *The stability of the self-concept in adolescence*. *Dissertation Abstr.*, 1957, 17, 1810-1811.—Abstract.

3988. Foster, Clifford Donald. *Philosophical implications of parent-child relationship*. *Dissertation Abstr.*, 1957, 17, 1960.—Abstract.

3989. Franus, Edward. *Pierwsze reakcje onieśmienia i przestrachu u dziecka w świetle nauki Pawłowa*. (First reactions of shyness and fear in children in the light of Pavlov's teaching.) *Studia pedag.*, 1955, 2, 183-206.—The author systematically

investigated the development and course of reactions to strange and unknown stimuli (unknown person and a mask) in an infant from 14 weeks to 8 months old, and additionally checked his observations on a number of other children. The children's behavior was photographed and filmed. The observed reactions are described in detail and analyzed from the Pavlovian point of view.—*M. Choynowski.*

3990. Gewirtz, Jacob L. A program of research on the dimensions and antecedents of emotional dependence. *Child Develpm.*, 1956, 27 (2, Suppl.), 205-221.—"A research program is outlined for investigating the laws characterizing emotional dependence in childhood. In particular, emphasis is placed upon the identification of the dimensions operating in behaviors which appear to be employed to gain certain social responses from other persons (like those apparently employed for attention, approval, affection, reassurance, and the like); and the conditions under which they develop."—*L. S. Baker.*

3991. Gofman, Helen; Buckman, Wilma, & Schade, George H. The child's emotional response to hospitalization. *A.M.A. J. Dis. Child.*, 1957, 93, 157-164.—From interviews with 100 hospitalized children, 3-15 years of age, the authors conclude that 75% of children are not adequately prepared for hospitalization. Simple explanation would be sufficient to prepare most of them, and those who are given explanation have been found to be more cooperative during treatment.—*G. K. Morlan.*

3992. Haworth, Joyce. The relationship between the play of a group of school children and their personality traits. *Bull. Brit. psychol. Soc.*, 1957, 32 (Inset), 19.—Abstract.

3993. Heinicke, Christoph. Some effects of separating two-year-old children from their parents: A comparative study. *Bull. Brit. psychol. Soc.*, 1957, 32 (Inset), 9-10.—Abstract.

3994. Jones, Harold E. The replacement problem in child development. *Child Develpm.*, 1956, 27 (2, Suppl.), 237-240.—There is a need for increased interest, on the part of educational institutions and other groups, in the field of child development, which has been suffering from a lack of research-oriented specialists. Graduate programs specializing in development psychology are too few.—*L. S. Baker.*

3995. Karńska, Wanda. Rozwój słownika w grupie 5-6-letnich dzieci z przedszkola. (The development of the vocabulary in a group of 5-6-years old preschool children.) *Zes. Naukowe Univ. A. Mickiewicza Fil., Psychol., Pedagog.*, 1956, 1, 82-84.—The author distinguishes three stages in the assimilation of new words: the introduction of a new word, the fixation of a word and the development of the active use of a word, and discusses a number of problems and conclusions connected with her investigation of preschool children of 5 and 6 years old.—*M. Choynowski.*

3996. Kawaguchi, Isamu. Jidōgo no shūdan seisaku ni kansuru kenkyū: Kyōdō-sei no hattatsu to shūdan funiki tonō kankei. (A study of the children's group-work in painting: With emphasis on the developmental stage of cooperativeness and its relation with group atmosphere.) *Jap. J. educ. Psy-*

chol., 1956, 3, 214-220.—Groups of 8 children worked together in painting on large paper. The amount of cooperativeness was determined by the degree of integration of their performance. The results showed that the cooperation in the painting begins at the end of the 1st grade and completes at the 2nd half of the 2nd grade. During the period of the development, because of unstable cooperativeness, some relation was found between the group atmosphere and the paintings, which was not observable after the end of 2nd grade. English summary, p. 245-246.—*S. Ohwaki.*

3997. Kent, Norma, & Davis, D. Russell. Discipline in the home and intellectual development. *Brit. J. med. Psychol.*, 1957, 30, 27-33.—Children of demanding parents score higher on the Stanford-Binet than do children of normal parents, and there are no differences in reading and WISC performance scale scores. Children of overanxious parents score lower than children of normal parents on WISC performance scales, and do not differ on the Binet nor on reading tests. Unconcerned parents seem to produce children who are inferior on the Binet and reading tests. "Our results appear, therefore, to confirm the hypothesis that intellectual development, as measured by the Binet Scale and the WISC 'performance' subtests, is influenced to an important degree by that aspect of the family environment which we call the discipline in the home."—*C. L. Winder.*

3998. Koch, Helen L. Some emotional attitudes of the young child in relation to characteristics of his sibling. *Child Develpm.*, 1956, 27, 393-426.—Subjects (384) were pairs of sibs from two-child, urban, native born, white, intact families. Among significant findings were: (1) First-borns were able to recover less readily from upsets and anger than second-borns. (2) First-borns were rated more self-confident. (3) Second-born males showed more nervous habits than first-borns. (4) Among first-borns, children from opposite-sex sib pairs tended to have better health than those from same-sex pairs. (5) There were more signs of stimulation or stress among members of pairs whose sib was different in sex than among members of sib pairs similar in sex. (6) Children with a brother were less sensitive than those with a sister. The meaning of these findings is discussed. 19 references.—*F. Costin.*

3999. Kowalski, Stanisław. Przyczynek do zagadnienia faz rozwoju myślenia i języka dziecka. (A contribution to the problem of the stages of the development of child's thought and language.) *Zes. Nauk. Univ. A. Mickiewicza Fil., Psychol., Pedagog.*, 1956, 1, 15-59.—The successive parts of this paper are devoted to the physiological bases of the development of language and thought (from the Pavlovian point of view), to the thought and speech of a small child as belonging not only to the second signal system, but also to the first, to the period of situational thought and speech, to concrete-imaginative speech, to thought, detached of actual situation, and to the crisis in the development of a child beginning to attend school. "Without doubt the skill to formulate thoughts in writing is a basis factor in the development of thinking, and especially in the development of abstract thinking in the transitory period from the phase of concrete-imaginative thinking to the phase of abstract thinking."—*M. Choynowski.*

4000. Lambert, Wallace E., & Taguchi, Yosh. Ethnic cleavage among young children. *J. abnorm. soc. Psychol.*, 1956, 53, 380-382.—"Ethnic cleavage among preschool children was studied using various test situations where choices of associates could be observed. It was found that ethnic cleavage does exist when choices are made significant to young children. The results are compared with other related findings and attempts are made to explain them theoretically."—A. S. Tamkin.

4001. McCandless, Boyd R., Castaneda, Alfred, & Palermo, David S. Anxiety in children and social status. *Child Developm.*, 1956, 27, 385-391.—High reliabilities were obtained for single-question friendship sociometric tests administered by classroom teachers to fourth, fifth, and sixth graders. Sociometric status was related to anxiety (as measured by the manifest anxiety scale) as follows: high negative correlation for fifth graders; moderate negative correlation for fourth graders; approximately zero correlation for sixth graders. 21 references.—F. Costin.

4002. Ormian, Haim. Hapsikhologia shel she-not hayaldut haahronot. (Psychology of later childhood. (3d ed.)) Jerusalem, Israel: Zionist Organization, Youth Department, 1957. 104 p.—This edition of this book (see 25: 5205), intended for youth-leaders and students in teacher training colleges. Special attention in enlarged chapters is given to subjects as: emotional experiences, individual differences (especially among children of newcomers in Israel), the dynamics of the later childhood and this stage of development as a transition period between childhood and adolescence.—H. Ormian.

4003. Ponzo, Ezio. An investigation into the development of juridical knowledge in children. *Educ. & Psychol., Delhi*, 1956, 3(2), 1-20.—This article reports the results obtained on 569 subjects of varying developmental ages with a projective device, the Story of the Adventures of Andrew, in which there are a series of actions containing aspects of criminal behavior punishable by law. Analysis of the data enabled the experimenter to determine how and when the development of juridical knowledge becomes a determining factor in the evolution of rules explaining individual behavior.—H. Angelino.

4004. Przetacznikowa, Maria. Przysiotniki w mowie dziecka w wieku przedszkolnym. (Adjectives in the speech of the child of pre-school age.) *Studia pedag.*, 1955, 2, 75-115.—In this paper the author analyzes adjectives found in the same group of 20 two-year-old children as has been used by Szuman, taking into account different categories of content and different semantical aspects.—M. Choynowski.

4005. Roth, Heinrich. Zur pädagogischen Psychologie des Gewissens und der Gewissenserziehung. (The pedagogic psychology of conscience and of its education.) *Jb. Psychol. Psychother.*, 1956, 4, 229-248.—Conscience is a product of development. It stems from the felt discrepancy between ideal and reality, and is thus intimately linked with experience of values. It is initially elicited by parental consciences which in turn are introjected by the child. Through a lengthy educational process the child comes to terms with the values of others, and learns increasingly to realize his own values. Thus, ideally, a positive conscience answerable to love comes to re-

place the earlier conscience more sensitive to prohibitions. 36 references.—E. W. Eng.

4006. Schreiber, Flora Rheta. Your child's speech: A practical guide for parents for the first five years. New York: Putnam, 1956. 256 p.—A popularly-written discussion of children's language learning. Chapters 1 and 2 emphasize that "your child talks like you" and discuss early speech learning processes. Chapters 3-7 present detailed developmental descriptions for the child's first to fifth year. Chapters 8-10 are concerned with the child who develops slowly, the child with a speech defect, and the gifted child. 33 references.—J. B. Carroll.

4007. Sigel, Irving E. The need for conceptualization in research on child development. *Child Developm.*, 1956, 27 (2 Suppl.), 241-252.—The "holistic approach" does not appear to be fruitful in the field of child development. Rather, an approach might be in terms of thinking of the child as "an organization of a number of systems, which function at varying degrees of autonomy and interrelatedness." Particular emphasis may be laid on field studies dealing specifically "with home-neighborhood-school constellations. . . ."—L. S. Baker.

4008. Spiker, Charles C. Experiments with children on the hypotheses of acquired distinctiveness and equivalence of cues. *Child Developm.*, 1956, 27 (2, Suppl.), 253-263.—"Research with children can be brought to bear on hypotheses from general behavior theory." However, "it does not seem that the child can profitably be viewed as a unique subject for psychological investigation. Rather the child is another subject for psychological study, and for theoretical and/or practical reasons, certain problems are more appropriately studied with children than with other subjects." A review of some experiments bearing out this statement is given. 29 references.—L. S. Baker.

4009. Szuman, Stefan, & Dunin-Tombińska, Teresa. Rozwiązywanie zagadek przez dzieci w wieku przedszkolnym. (The solving of riddles by children of pre-school age.) *Studia pedag.*, 1955, 2, 116-148.—The subject of this paper is the analysis of the riddle as one of the means of the unfolding of mental abilities. The authors analyze the nature of the riddle and review the results of their research. 20 riddles were given to 184 children from 4 to 7 years old. Having given the answer (good or bad) children had to explain how they solved a riddle. The paper ends with the discussion of some educational problems connected with the use of riddles.—M. Choynowski.

4010. Tischler, Hans. Schreien, Lallen und erstes Sprechen in der Entwicklung des Säuglings. (Crying, stammering, and first speech in the development of the infant.) *Z. Psychol.*, 1957, 160, 210-263.—Over a period of 6 months the development of sounds of 17 children aged 1 month to 18 months was investigated. During the first months hunger governs the crying act. After the 3rd month crying decreases even when the child is hungry. This decrease is especially marked when the first stammering sounds appear. This stammering showed itself to be extremely plastic in nature. Phonetically speaking, the greatest variety of sound production occurred between the ages of 8 to 12 months. After the age of 12 months the sounds are less varied, but begin to have

intentional and communicative character. The understanding of the human speech act is taken as a prerequisite for production of first true speech.—K. M. Newman.

4011. Tonkova-Iampol'skaia, R. V. K kharakteristike sosudistykh uslovnykh refleksov u detei mladshego vozrasta. (On the characteristics of vascular conditioned reflexes in children in the younger age group.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 697-701.—The plethysmograms of most of the subjects, children from 2 to 5 years of age, recorded a pronounced pulse change and a marked vasoconstriction reaction to cold stimuli. Positive conditioned reflexes were rapidly established (2-8 combinations). They were of considerable magnitude and relatively stable. The elaboration of differentiation proved to be rather difficult. The rest of the subjects displayed an "inert" plethysmogram and slight reaction to ice. The elaboration of positive conditioned reflexes proceeded slowly (8-18 combinations) and, when elaborated, were unstable. On the other hand, differentiation was readily established. It is concluded that a "certain predominance of positive conditioned reflexes is a normal occurrence for the given age, while the predominance of inhibitory reactions in some children calls for a special approach in their bringing up."—I. D. London.

4012. Vener, Arthur M. Adolescent orientations to clothing: A social-psychological interpretation. *Dissertation Abstr.*, 1957, 17, 1617-1618.—Abstract.

4013. Wawrzyniak, Ludwika. Psychologiczna analiza treści i sposobów recytacji utworów dla dzieci wieku przedszkolnego i wczesnoszkolnego. (Psychological analysis of the content and ways of recitation of verses for children of preschool and early school age.) *Zes. Nauk. Univ. A. Mickiewicza Fil., Psychol., Pedagog.*, 1956, 1, 75-78.—The author is working on the problem of recitation of poetry as a means of developing child's speech. In this paper she discusses the psychological classification of literary works which are used for recitation purposes, the classification of manners of recitation, and the problem of methods to teach children the correct techniques of recitation.—M. Chojnowski.

4014. Wilk, Roger Edward. The self perceptions and the perceptions of others of adolescent leaders elected by their peers. *Dissertation Abstr.*, 1957, 17, 1954-1955.—Abstract.

4015. Zaporozhets, —. Soviet studies on the development of thought in children. *Educ. & Psychol., Delhi*, 1956, 3(3), 1-7.—The Soviet approach to the problem of the development of thought in children is presented. Intelligence testing has been discarded. There was difficulty in determining precisely what the tests were supposed to measure. Then the tests show only results, achievements, etc., but not how or by what processes the individual arrives at results. These mental processes are precisely the real issues at stake. Knowledge of the powers of generalization in children of all ages will permit organization of suitable teaching materials. It is the individual's "conditions of life" and his education from early infancy that play the decisive parts in the development of intellectual ability. Soviet scientists do not assume that school failures or problems in children are due to "innate, fatalistic, determining

factors" but rather that such causes can be found in his "conditions of life" and early education. Here is where the cure should be attempted. Summaries of Soviet studies in various aspects of the development of thought in children are presented.—H. Angelino.

4016. Ziegenhagen, Teresa. Rozwój wymowy w wieku przedszkolnym. (The development of pronunciation in preschool age.) *Zes. Nauk. Univ. A. Mickiewicza. Fil., Psychol., Pedagog.*, 1956, 1, 64-74.—This is a report concerning the development of child's pronunciation, based on 146 children 3-6 years old, examined twice in the space of six months. Peculiarities and deficiencies of pronunciation are described and presented in tables and diagrams showing the general regularity of the development and the utility of orthophonic exercises.—M. Chojnowski.

(See also Abstracts 3776, 3808, 3892, 3896, 3922, 4076, 4109, 4190, 4192, 4197, 4298, 4342, 4461, 4495, 4543, 4547, 4617)

MATURITY & OLD AGE

4017. Blau, Zena Smith. Old age: A study of change in status. *Dissertation Abstr.*, 1957, 17, 1618.—Abstract.

4018. Cowgill, Donald O. Trends in the ecology of the aged in American cities. *J. Geront.*, 1957, 12, 75-80.—6 propositions of a general hypothesis that, "... the central areas of American cities were tending to become characterized by a greater proportion of old people," were tested. The hypothesis was partially confirmed.—J. Botwinick.

4019. Downing, Joseph. Factors affecting the selective use of a social club for the aged. *J. Geront.*, 1957, 12, 81-84.—By way of unstructured interviews with persons aged 65 years or older, data were gathered relative to the use of a social club in Syracuse.—J. Botwinick.

4020. Feifel, Herman. Judgment of time in younger and older persons. *J. Geront.*, 1957, 12, 71-74.—Two age groups were compared with respect to time estimation of intervals of 30, 60, 180 and 300 sec. One group comprised 40 persons averaging 67 years and the other 39 persons averaging 24 years. Both age groups underestimated the time for all intervals, but the older group did so reliably more than the younger. When the older group was divided into those persons with 'positive outlooks' and those with 'gloomy' ones, it was found that the former subgroup had relatively more accurate estimations.—J. Botwinick.

4021. Kamin, Leon J. Differential changes in mental abilities in old age. *J. Geront.*, 1957, 12, 66-70.—Two aged groups and one younger one of 25 subjects each were tested 4 times with Thurstone's Primary Mental Abilities test battery. The decline of mental abilities with age was larger for space and reasoning than for verbal meaning, number, and word fluency. All groups improved with practice. An attempt was made to increase performance scores of the fourth testing by cash incentives.—J. Botwinick.

4022. Kurth, Gertrud Maria. The anticipation of the decline of life as a function of psychological variables. *Dissertation Abstr.*, 1957, 17, 1812.—Abstract.

4023. Oberleder, Muriel. Attitudes related to adjustment in a home for the aged. *Dissertation Abstr.*, 1957, 17, 1598.—Abstract.

4024. Phillips, Bernard S. A role theory approach to adjustment in old age. *Amer. sociol. Rev.*, 1957, 22, 212-217.—An analysis of adjustment in old age and an attempt to isolate factors which could be utilized to predict maladjustment in the older population. Of major significance in determining the kind of emotional adjustment the aged could make was the individual's perception of himself as an old person and the assumption of social behavior commensurate to such a role.—G. H. Frank.

4025. Taietz, Philip, & Larson, Olaf F. Social participation and old age. *Rur. Sociol.*, 1956, 21, 229-238.—Interviews in 4 N. Y. rural communities led to the conclusions that "low socio-economic status and retirement combine to produce low participation in formal organizations among aged male household heads in rural communities; that retirement produces a change in the pattern of participation; and that advanced age brings about less of a reduction in participation than either low socio-economic status or retirement."—H. K. Moore.

4026. U. S. Department of Labor. Bureau of Employment Security. Older worker adjustment to labor market practices: An analysis of experience in seven major labor markets. *Bur. Empl. Secur. Bull.*, 1956, No. R151, v, 269 p.—This material is based upon a large survey of labor market conditions, the purpose of which was, "... to determine the nature and extent of the problems of older workers in the labor market and provide a factual basis for helping to resolve those problems." 7 different areas of the country were surveyed, which in total averaged 160,000 job seekers per week. Those above the age of 45 were 40% of the total; those over the age of 65 were 10% of the total job seekers. The characteristics of the older workers were analyzed in comparison with younger workers, and also the age factors in labor turnover were analyzed.—J. E. Birren.

(See also Abstracts 4393, 4416)

SOCIAL PSYCHOLOGY

4027. Bastin, G. Aspects de la dynamique de groupe et relations humaines. (Aspects of group dynamics and human relations.) *Cah. Pédag.*, 1957, 16, 165-169.—Too often we tend to conceive of human relations as relations between individuals. But in industry, the school, or the army, the chief as well as the subordinate is as often in contact with groups or sub-groups as with individuals. The study of small groups can be applied to phenomena of syntality or to systems of interaction. Sociometry likewise offers some interesting research methods.—R. Piret.

4028. Berkowitz, Leonard, & Levy, Bernard I. Pride in group performance and group-task motivation. *J. abnorm. soc. Psychol.*, 1956, 53, 300-306.—This experiment tested the propositions that pride in one's group results from the members' perceptions of effective task performance of the group as a whole and is directly associated with high motivation toward the assigned task of the group. 25

3-man groups assigned to work on a simulated Air Defense task were distributed among 5 experimental conditions. The measure of task motivation was the amount of task-oriented discussion during a "break" period. "Evidence is cited supporting the hypothesis that the high group-task motivation results from a perception of interdependence among the group members with respect to the attainment of reward."—A. S. Tamkin.

4029. Brodbeck, A. J. Religion and art as socializing agencies: A note on the revision of Marxist and Freudian theories. *Psychol. Rep.*, 1957, 3, 161-165.—A basic similarity is pointed out between Marx's views on the social engineering functions of religion and Freud's views on the social engineering functions of art. It is proposed that the fantasy engendered by art and religion may be viewed from a "problem-solving" standpoint in which "catharsis" is but one of the alternative effects fantasy may have upon those exposed to it, and that the empirical study of the effects of artistic and religious fantasies upon people from a "problem-solving" standpoint may initiate new developments in the theory of fantasy as a technique of social influence.—C. H. Ammons.

4030. Crockett, W. H., & Meidinger, Thomas. Authoritarianism and interpersonal perception. *J. abnorm. soc. Psychol.*, 1956, 53, 378-380.—This study is a replication of research concerning the relationship between authoritarianism, as measured by the California F scale and accuracy of interpersonal perception. Ss were students at Kansas State College, and the method was similar to that used previously by Scodel and Mussen and by Scodel and Freedman. Pairs of Ss discussed for 20 minutes an assigned topic after taking the F scale. After the discussion they were asked to fill out the F scale as they felt their partners in the discussion would respond to it. The previous findings were duplicated by this study. The mean estimate by high F Ss was very similar to the mean of the high F Ss' own scores, regardless of the partners' actual positions on the F scale.—A. S. Tamkin.

4031. Dorsey, Robert Nicholson. An investigation of the stability of social sensitivity and its relationship to verbal behavior. *Dissertation Abstr.*, 1957, 17, 1810.—Abstract.

4032. Esdras-Gosse, Bernard. Psychologie du prisonnier de guerre français dans les camps disciplinaires. (Psychology of the French prisoner of war in concentration camps.) *Rev. Psychol. Peuples*, 1956, 11, 40-62.—The French POW fought a constant battle to maintain his individuality in the face of pressures for conformity and anonymity. After the initial resignation to his situation, the individual settled and organized himself as well as he could and then he became a member of the POW society. 2 special hardships requiring his adjustment stemmed from hunger and enforced labor. In both of these, he had to make due with inadequate supplies, little food and outdated equipment and working conditions. His contempt for the enemy and its methods grew with his concern for France, about which he heard little. Throughout his captivity, he was sustained by his instinct of self-preservation, heightened by the uncertainty of what was to come. Often he emerged,

knowing how to serve and obey, but a man with great moral strength.—R. O. Peterson.

4033. Gold, Bertram. Some differences between accepted and rejected members of effective and ineffective groups. *Dissertation Abstr.*, 1957, 17, 1832-1833.—Abstract.

4034. Granai, Georges. Remarques sur la situation de la psychologie sociale dans les sciences humaines Américaines. (Observations on the position of social psychology in the behavioral sciences in America.) *Année psychol.*, 1956, 56, 59-65.—Social psychology and sociology have poorly defined limits in America. The former suffers for lack of a real sociology. However, both of these have greatly improved the methodology of anthropology.—G. Rubin-Rabson.

4035. Heyns, Roger W. Social psychology and group processes. *Annu. Rev. Psychol.*, 1958, 9, 419-452.—This review covers the period between April 1956 and April 1957. 111-item bibliography.—A. J. Sprow.

4036. Kanareff, Vera Tihanovna. Small group decision making as a function of the distribution and discrepancy of problem-relevant information. *Dissertation Abstr.*, 1957, 17, 2078.—Abstract.

4037. Kuenzli, Alfred E. Ethical implications of the social sciences. *Educ. Theory*, 1957, 7, 69-73.—The thesis is the emergence, in American society, of the social sciences, especially social psychology and cultural anthropology, as an ideological and ethical force to be recognized and contended with. In their focus on the causal analysis of an act and its correction, rather than on moral condemnation and retribution, these disciplines imply "a morality to end all moralities." The Supreme Court decision on desegregation is discussed as an example of the ethical potency of the social sciences. The question is raised: To what extent should the social sciences become militant in propagating their findings and frame of reference?—A. E. Kuenzli.

4038. Lanzetta, John T., & Roby, Thornton B. Effects of work-group structure and certain task variables on group performance. *J. abnorm. soc. Psychol.*, 1956, 53, 307-314.—This investigation explored how team performance varies as a function of information processing demands and how the information-handling capacity of teams depends upon the requirements for internal transmission of information imposed by a communication structure. 3-man groups performed a simple "team" task under 2 different work structures, differing in the extent to which they required the transmission of information. "... the most difficult structure was that in which a larger proportion of information had to be relayed ... from several different sources. ... Errors for both structure conditions significantly increased when the rate of change of instrument readings increased."—A. S. Tamkin.

4039. Mannheim, Betty Friedmann. An investigation on the interrelations of reference groups, membership groups, and the self image: A test of the Cooley-Mead theory of the self. *Dissertation Abstr.*, 1957, 17, 1616-1617.—Abstract.

4040. Meyer, John Kellogg. Sociopsychological correlates of authoritarianism and response set in

authoritarianism. *Dissertation Abstr.*, 1957, 17, 2059.—Abstract.

4041. Montagu, M. F. Ashley. Nature, nurture, and nutrition. *Amer. J. clin. Nutr.*, 1957, 5, 237-244.—An anthropologist's analysis of cultural factors in nutritional behavior, with special consideration of the modifiability of food habits and of the socially binding aspects of food procurement and consumption.—J. Brožek.

4042. Moser, Ulrich. *Psychologie der Partnerwahl*. (Psychology of partner choice.) Stuttgart, Germany: Hans Huber, 1957. 228 p. 26 DM.—In this volume the author attempts to examine on a scientific basis the choice of partners in love, marriage, and friendship. By using psychoanalytic and sociological concepts, a new and differentiated theory of choice as applied to partners is developed. At hand of one explicit and extensive example the various guiding factors in the problem of partner choice are examined and shown as to their effectiveness and mutual interaction. The material stems from the psychoanalytic protocols of a male patient, augmented by intensive ancestral analyses in the sense promulgated by Szondi. The question of choice in dream elements is also thoroughly examined. In addition the author presents a scheme of the various neuroses which is intended to augment, expand and refine the present psychoanalytic concepts of neuroses. 122 references.—K. M. Neuman.

4043. Ortega y Gasset, Jose. *Man and people*. New York: Norton, 1957. 272 p. \$4.50.—In this book the author presents his philosophical ideas concerning man, society, and the interrelation between persons and groups. With a definite spiritualistic bias the author discusses among other things: (1) the awareness of self and others; (2) the nature of personal and social usage; (3) the principles of language, and (4) the sociology of public opinion, social observance, and public power.—J. R. Kantor.

4044. Perlmutter, H. V. Some relationships between xenophilic attitudes and authoritarianism among Americans abroad. *Psychol. Rep.*, 1957, 3, 79-87.—The conscious motives for leaving one's own country and going to live in another area bound up with conflicts and anxieties concerning "domestic authority figures," but the foreign authority figures soon come to exert important influences. The F scale was found to be inadequate for directly measuring authority orientations presumed to underlie xenophilia, and 2 hypotheses for further research were proposed: (1) Xenophilia involves a breaking away from domestic authority symbols in exchange for less threatening foreign ones. (2) The choice of the foreign authority is dependent on its perceived difference from the domestic authority. A high rating in xenophilia is associated with attraction to foreign women.—C. H. Ammons.

4045. Rabinowitz, William. A note on the social perceptions of authoritarians and nonauthoritarians. *J. abnorm. soc. Psychol.*, 1956, 53, 384-386.—104 college students were given a 28-item version of the F scale twice. In the first administration Ss were given the usual instructions, but in the second administration they were asked to give the responses they believed would be given by a typical student at their college. Among the results, it was found that there is a general tendency for Ss to estimate higher

F scale scores for the typical student than they themselves possess and that the general tendency of the Ss to estimate F scale scores higher than their own is more marked among the nonauthoritarians than the authoritarians.—*A. S. Tamkin.*

4046. Rogler, Lloyd H. An experimental study of the relationship between structured behavior patterns and accuracy of social sensitivity. *Dissertation Abstr.*, 1957, 17, 2080.—Abstract.

4047. Rosenberg, Milton J. Cognitive structure and attitudinal affect. *J. abnorm. soc. Psychol.*, 1956, 53, 367-372.—3 hypotheses concerning the relationships between attitude toward an object and beliefs about that object were tested. 117 Ss were given a questionnaire designed to elicit attitudes towards allowing members of the Communist party to address the public. Several weeks later each S took a card sorting test designed to elicit the importance of certain values as a source of satisfaction and whether the values tend to be blocked by the attitude object. The hypotheses were confirmed, and "some of the data were interpreted as suggesting that 'value importance' and 'perceived instrumentality' are separate and possibly manipulable dimensions of attitude-related cognitive structures."—*A. S. Tamkin.*

4048. Rosenman, Stanley. The paradox of guilt in disaster victim populations. *Psychiat. Quart. Suppl.*, 1956, 30, 181-221.—The disaster literature frequently notes the omnipresence of guilt in a disaster population. In a disaster there is emotional regression with reduction of critical capacities and a return to animistic and paranoid-schizoid interpretations of events. The disaster may activate a dormant internal judge to enforce the deserved punishment upon the self. The victim may unconsciously conclude that it is because of his falsity that an angry God smites him. The disaster may be equated with one's own aggressive urges. Frustrations aroused by the disaster situations increase hostility toward significant figures and thus increase guilt. The individual subjected to the disaster suspects himself as the causal agent. The disaster may sharpen the individual's awareness of existing flaws in his emotional ties to the group. Insight may free the disaster victim from the heavy tolls he often pays to the disaster. 38 references.—*D. Prager.*

4049. Roucek, Joseph S. The sociology of violence. *J. hum. Relat.*, 1957, 5(3), 9-21.—An analysis of the relationship between force and justice. In such societies as ours the great hope seems to be to transform the social process of conflict into the social processes of accommodation. 24 references.—*R. M. Frumkin.*

4050. Schall, James V. Some philosophical aspects of culture and religion. *New Scholast.*, 1957, 31, 209-236.—It is felt that the most discussed problem common to modern historical, anthropological, and political thinking is that of culture. Basic to the idea of culture is the intimately related idea of religion. This paper attempts a thorough analysis of the philosophical meaning of the notion of culture, and the psychological point of contact between religion and culture. It is concluded that the social sciences have "truncated themselves" by a neglect of the science of philosophy and theology.—*G. S. Speer.*

4051. Segerstedt, Torgny T. The group as a sociological and anthropological concept. *Trans.*

Westermarck Soc., 1956, 3, 102-113.—In this paper the author puts forth a theoretical model or construct of the group which he believes to be useful in anthropological as well as in sociological research. "A group consists of two or more persons controlled by norms that can be traced back to the same source (norm-source). The fact that they are controlled by the same norms may be expressed by saying that the persons in question behave in a uniform way or have the same social customs. When we use 'group' as a theoretical construct, we consequently have three basic concepts: 1. customs or uniform behavior, 2. norms, and 3. norm-sources." The source pronounces the norms, the norms create dispositions of behavior or release behavior. Thus the relation is assumed to be a causal one. "The hypotheses we present must all concern the relations inside the theoretical model."—*M. Chojnowski.*

4052. Strunk, O., Jr. Flesch counts of five social psychology textbooks. *Psychol. Rep.*, 1957, 3, 363-364.—The five social psychology textbooks examined in this study were: Asch, *Social Psychology*; Klineberg, *Social Psychology*; Krech and Crutchfield, *Theory and Problems of Social Psychology*; Newcomb, *Social Psychology*; and Sherif and Sherif, *An Outline of Social Psychology*. With readability ranging from "difficult" to "fairly difficult" and with interest being "mildly interesting" to "dull," it would appear that the five texts are about the same in difficulty and interest as introductory texts and readers. The author wonders if textbook readability and interest have much to do in determining attitudes toward psychology.—*C. H. Ammons.*

4053. Tönnies, Ferdinand. Community and society. (Gemeinschaft und Gesellschaft.) East Lansing: Michigan State Univer. Press, 1957. xii, 298 p. \$7.50.—Translated from the German and edited by Charles P. Loomis this classical treatise in sociology appeared first in 1887.

4054. Van Krevelen, Alice. Relationships between number of verbal associations to value words and subjective ratings of values. *Proc. Iowa Acad. Sci.*, 1956, 63, 576-580.—Varying the procedure used by Bousfield the author had subjects rank statements descriptive of Spranger's personality types adapted from the Study of Values Manual. The same subjects associated to words descriptive of these values and the number of such associations were given standard score values. Correlations between the values and number of associations were low and only one (political) significantly above zero. There was, however, a relationship between the rank of the values of individual subjects and the meaningfulness score obtained for each ranked value.—*C. F. Haner.*

4055. Westie, Frank R. Toward closer relations between theory and research: A procedure and example. *Amer. sociol. Rev.*, 1957, 22, 149-154.—The author presents a research procedure whereby "... empirical investigations may be pursued with a degree of theoretical relevance despite the existence of theoretical incoherence in the area of investigation." The discussion deals with the research worker in areas such as in the social sciences wherein unequivocal theoretical formulations are lacking. The solution proffered involves a comprehensive listing of the pre-supposed empirical relationships which

might possibly turn up in the research at hand, and a listing of a range of interpretations. The final interpretation is made by excluding the non-appropriate ones.—G. H. Frank.

(See also Abstracts 3912, 3919, 4019, 4123, 4295, 4334, 4690)

METHODS & MEASUREMENTS

4056. Attneave, Fred, & Chambliss, Davis J. An improved method for deriving equal-discriminability scales from ratings. *Psychol. Bull.*, 1957, 54, 253-255.—Rating scales derived with variability of judgment as the unit of measurement contain a spurious factor arising from differences in the constant rating tendencies of individuals. A technique for constructing scales which yield distributions as nearly as possible equal in dispersion is illustrated.—W. J. Meyer.

4057. Barron, Arthur S. The effects of three styles of interviewing on the responses of women from two contrasting socio-economic groups. *Dissertation Abstr.*, 1957, 17, 1833-1834.—Abstract.

4058. Bass, Bernard M. Development and evaluation of a scale for measuring social acquiescence. *J. abnorm. soc. Psychol.*, 1956, 53, 296-299.—"A 56-item scale of social acquiescence has been developed by internal consistency item analysis. It has a reliability above .90 and correlates .95 with the tendency to accept or reject 300 proverbs, aphorisms, and similar statements. According to population differences and correlations between scales and various personality and intelligence measures, one who earns a high Social Acquiescence score resembles Sinclair Lewis' 'Babbitt'—an unquestioning conformer to social demands."—A. S. Tamkin.

4059. Bass, B. M., Gaier, E. L., Farese, F. J., & Flint, A. W. An objective method for studying behavior in groups. *Psychol. Rep.*, 1957, 3, 265-280.—An objective method for studying behavior in small groups is described. The data can be collected and analyzed by paper and pencil methods, mark-sense cards, and IBM computer, or by members' operating an analog computer as part of their group task, or by combinations of these. Scores are related to definitions of a theory of leadership, are algebraically independent, and reliable. The method lends itself to attack on a wide variety of problems.—C. H. Ammons.

4060. Beal, George M. Additional hypotheses in participation research. *Rur. Sociol.*, 1956, 21, 249-256.—He suggests the use of and gives some results from relating social participation to "dynamic" variables such as having a say in decision making, instead of exclusively using such relatively unchangeable or "static" variables as age, occupation, family status and occupation.—H. K. Moore.

4061. Belson, W. A. Self-completion questionnaires for use in random surveys and some other developments in method. *Bull. Brit. psychol. Soc.*, 1957, 31, 45-46.—Abstract.

4062. Green, T. L. Stereo-index and stereo-profile: Methods for presenting stereotypic statistics. *Educ. & Psychol. Delhi*, 1956, 3(3), 18-25.—2 techniques are presented for recording responses to stereotypes. Although subject to certain limitations the stereotypic index provides a means for presenting

graphically the quantitative statements of the favorable or unfavorable attitudes held towards other groups. The stereotypic profile is useful when the characteristics studied are organized into syndromes for graphic presentation.—H. Angelino.

4063. Hauser, Philip M., Duncan, Otis Dudley, & Duncan, Beverly Davis. Methods of urban analysis: A summary report. *USAF Person. Train. Res. Cent. Res. Rep.*, 1956, No. 56-1. ix, 78 p.—A method, called the cost-utility method, was developed for analyzing the geographic distribution of human and material resources in an urban area, to aid in decision making in population sampling problems. It involves mapping of a city or metropolitan area by appropriate sub-areas and compiling information by sub-areas. Cost and utility concepts are applied to data collection decisions by estimating the amount of coverage required (cost) to obtain a given amount of information (utility). Application of the method in the Chicago Urban Analysis Project are discussed.—S. B. Sells.

4064. Kish, Leslie. Confidence intervals for clustered samples. *Amer. sociol. Rev.*, 1957, 22, 154-165.—A discussion of the statistical difficulties involved in sampling methods of research in the social sciences, and suggestions for coping with such problems in research design.—G. H. Frank.

4065. Kogan, Nathan, & Downey, James F. Scaling norm conflicts in the area of prejudice and discrimination. *J. abnorm. soc. Psychol.*, 1956, 53, 292-295.—This study presents the development of a scale measuring militantly antidiscriminatory tendencies in particular social situations which require distinctive resolutions of norm conflicts. The Ss came from the high school population of a New England city who filled out a questionnaire requiring that they choose 1 of 4 courses of action for resolving Negro-white conflict situations. An 8-item Guttman scale resulted with a coefficient of reproducibility of .91.—A. S. Tamkin.

4066. Livson, N., & Nichols, T. F. Assessment of the generalizability of the E, F, and PEC scales. *Psychol. Rep.*, 1957, 3, 413-420.—The present study evaluates the homogeneity of the E, F, and PEC scales in two adolescent samples and contrasts certain scale characteristics obtained for these groups with those reported in the literature. Results strongly support the view that the appropriateness of the E, F, and PEC scales for new groups cannot be uncritically assumed. The problem of the generalizability of social attitude scales is discussed with reference to scale homogeneity, interpretation, and correlates.—C. H. Ammons.

4067. London, I. D. A neglected research resource and instrument in Soviet studies. *Psychol. Rep.*, 1957, 3, 459.—The Soviet emigré fills a real research need, if, as demonstrated by the past research of the Inwood Project on Intercultural Communication, he is employed as a member of a "tested" panel for systematic consultation. He constitutes a resource that has been unexploited except in a dilettantish way. The panel, of which he is a member, is an instrument whose potentialities have not been realized fully.—C. H. Ammons.

4068. Moscovici, Serge, & Durain, Geneviève. Quelques applications de la théorie de l'informa-

tion à la construction des échelles d'attitudes. (Applications of information theory to the construction of attitude scales.) *Année psychol.*, 1956, 56, 47-57.—The author indicates the limitations of attitude scales and proposes a more rational modality of statistical definition.—G. Rubin-Rabson.

4069. Pashalian, Siroon. The reliability of peer observers' ratings as a function of some variable characteristics of the rating scale. *Dissertation Abstr.*, 1957, 17, 1586-1587.—Abstract.

4070. Phillips, B. N., & DeVault, M. V. Evaluation of research on cooperation and competition. *Psychol. Rep.*, 1957, 3, 289-292.—The writers have tried to evaluate research on cooperation and competition with the aim of pointing up deficiencies in past research, locating areas of needed research: (1) Cooperation and competition tend to be thought of as dichotomous variables; (2) The empirical coordinates of cooperation and competition in group situations usually have involved manipulating the relationship-between-groups and the relationship-between-members; (3) The developmental and antecedent aspects of cooperation and competition have not been sufficiently investigated.—C. H. Ammons.

4071. Praet, M. Observatiemethode en-of sociometrie. (Observation methods and/or sociometry.) *Tijdschr. Opvoedk.*, 1957, 2, 357-369.—Sociometry and methods of observation mutually supplement one another. Sociometry gives a useful point of departure by revealing existing social interrelations, while observation attempts to verify hypotheses by a more penetrating analysis.—R. Piret.

4072. Rosenblith, J. F. How much invariance is there in the relations of "prejudice scores" to experiential and attitudinal variables? *Psychol. Rep.*, 1957, 3, 217-241.—Tests of the generality over time of the findings of Allport and Kramer as previously replicated by Rosenblith are reported here. The Rosenblith modification of the Allport-Kramer questionnaire was administered in 1952-53 to 239 college-age women and in 1954-55 to 147 college-age women and 109 college men. The questionnaires were scored as before and the same relationships examined. It appears that the generality of the relations is not as high as one would have hoped. The findings can perhaps best be looked at by regrouping them.—C. H. Ammons.

4073. Straus, Murray A. Personality testing the farm population. *Rur. Sociol.*, 1956, 21, 293-294.—Personality data are frequently needed in research with rural dwellers but such tests are almost never given. When certain preparatory steps are taken, however, there are very few refusals of cooperation on the part of farmers.—H. K. Moore.

4074. Van Bergen, A., & Spitz, J. C. De introductie van een schriftelijke enquête. (The introduction of a mail-questionnaire.) *Ned. Tijdschr. Psychol.*, 1957, 12, 68-96.—In order to study the differences in effect of three types of introductory letters to a mail questionnaire, viz.: topic-oriented, respondent-oriented, and research-institute-oriented, the influence of each type of letter on the refusal-ratio of the questionnaire was analyzed. No significant differences were found, but there was a significant difference in male subjects, showing a higher return-ratio of subjects, who first received a return-card, by which they could indicate their willingness to

cooperate, as compared to those, who did not.—R. H. Houwink.

(See also Abstracts 3932, 4351, 4625)

CULTURES & CULTURAL RELATIONS

4075. Faigin, Helen. Margaret Mead umeh-kareha. (Margaret Mead and her inquiries.) *Ofa-kim*, 1957, 11, 16-24.—Recently, Margaret Mead visited Israel as a guest of the Ministry of Health and as a counselor in immigrants' absorption and cultural changes. This paper is devoted to a systematic description of Mead's methods and findings in the field of cultural anthropology and their importance for studying modern society, and especially the cultural changes in Israel.—H. Ormian.

4076. Hilger, M. Inez. Araucanian child life and its cultural background. Washington, D. C.: Smithsonian Institution, 1957. xx, 439 p. \$7.00.—The numerous and partly acculturated Araucanians of central Chile and Argentina speak through informants and interpreters giving a broad picture of child life and Araucanian ethnology.—R. L. Sulzer.

4077. Hillery, George A., Jr. The Negro in New Orleans: A functional analysis of demographic data. *Amer. sociol. Rev.*, 1957, 22, 183-188.—"The fundamental goal of this paper is . . . to delineate empirically and theoretically . . . one aspect of the relationship between. . . One type of demographic phenomenon, racial differentials . . . (and) one sociological theory . . ." (that of W. I. Thomas, viz., "If men define situations as real, they are real in their consequences").—G. H. Frank.

4078. Landau, Claire. Interracial group work and social adjustment. *Dissertation Abstr.*, 1957, 17, 2083-2084.—Abstract.

4079. Lee, Dorothy. Cultural factors in dietary choice. *Amer. J. clin. Nutr.*, 1957, 5, 166-170.—Man's food intake is importantly affected by the culture of the society of which he is a member. "Culture may present food mainly as a means for the stilling of hunger, or of getting nutrition, or as the way to psychosomatic health; it may regard eating as a duty or a virtue, or as a gustatory pleasure, or as a social or a religious communion." Culture determines, in part, what and when will wet the appetite, what is considered tasty, what will bring a feeling of satiety. Even what is recognized as "food" depends on culture. Many dietary "choices" are made for the individual by his culture. Starvation may be preferred to infringement on a food taboo.—J. Brožek.

4080. Lee, J. A. H. Regional variations in intellectual ability in Britain: A discussion of their importance, and of the possible effects of selective migration. *Eugen. Rev.*, 1957, 49, 19-24.—The wide variations in average mental ability of populations in different sections of Britain may be due to selective migration, but data are lacking on mean intelligence in different places in relation to population movements. 4 tables accompany the article showing intelligence test scores of servicemen and children, and changes in population over 20 years in a series of English county boroughs.—G. C. Schwesinger.

4081. London, I. D., & London, M. B. Three flash studies in intercultural communication. *Psychol. Rep.*, 1957, 3, 143-148.—3 examples of rapid current analysis at a distance, each involving a maxi-

num of three days specific research, are presented. The studies reported explore the following topics: (a) the meaning of an unusual crowd formation in Leningrad on the occasion of a visit by a British flotilla; (b) the effect on a Soviet audience of a broadcast by a Soviet official over the Voice of America; and (c) the consistent knowledgeableness of the ex-Soviet citizen in the emigration as contrasted with that of the so-called "Russian expert."—C. H. Ammons.

4082. Newcomb, Franc Johnson; Fishler, Stanley, & Wheelwright, Mary C. A study of Navajo symbolism. *Pap. Peabody Mus.*, 1956, 32(3). viii, 100 p.—In Part I symbols from sand paintings and ritual objects (their color, number and cosmic significance) are descriptively related to ritual and myth. Part II presents and interprets a series of pictures used by a ceremonialist as a mnemonic device for leading various chants. Part III indicates similarities between Navajo symbols and those found in various other part of the world.—L. M. Hanks, Jr.

4083. O'Reilly, C. T. Testing hypotheses about prejudice. *Psychol. Rep.*, 1957, 3, 301-307.—Behavior of 679 Ss differed markedly from that of Ss in other studies, leading to a failure to confirm several hypotheses: (a) that feeling victimized as a member of a minority tends to be associated with greater prejudice; (b) that Ss with a "jungle philosophy" of life tend to be more prejudiced; (c) that "authoritarian submissiveness" is related to prejudice; (d) that fear of fraud is related to prejudice; (e) that "mirroring" parental attitudes is related to prejudice.—C. H. Ammons.

4084. Perlmutter, H. V., & Shapiro, D. Stereotypes about Americans and Europeans who make specific statements. *Psychol. Rep.*, 1957, 3, 131-137.—Results for 107 college students indicate that a greater degree of stereotyping occurs, as measured by the number of stereotyped items on the list, when the source is foreign, if the ascribed statement is extreme or preferential in nature. When it is moderate (equalitarian), no differences in stereotyping are observed.—C. H. Ammons.

4085. Sánchez-Hidalgo, Efraín. Autoridad, convivencia y función educativa del policía. (Authority, human relations, and the educative function of the police agent.) *Pedagogía, Río Piedras*, 1957, 5(1), 39-51.—The Puerto Rican culture is undergoing a period of transition from the paternalistic, Spanish concept of authority to the democratic, American concept of authority. Both concepts are mixed up in different practical situations. The effects of this transition upon human relations are considered. The police agent needs to be conscious of this transition regarding the concept and practice of authority. His task is both corrective and educational.—E. Sánchez-Hidalgo.

4086. Sasaki, Tom T. Sociocultural problems in introducing new technology on a Navaho irrigation project. *Rur. Sociol.*, 1956, 21, 307-310.—Reasons are given for the failure of this project and principles for future guidance are suggested.—H. K. Moore.

4087. Snyder, Charles R. Alcohol and the Jews: A cultural study of drinking and sobriety. Glen-

coe, Ill.: Free Press, 1958. 226 p. \$5.00.—Systematic interviews with Jewish men and a questionnaire to college students were used to relate the striking absence of inebriety among Jews to various factors typical of Jewish culture including ceremonial orthodoxy, family, class, and regional factors, the Jewish ingroup-outgroup situation with its stereotypes. The ways in which the signs of increasing alcoholism are noted in various different cultures are compared with Jewish patterns of conduct.—W. L. Wilkins.

4088. Sodhi, Kripal S., Bergius, Rudolf, & Holzkamp, Klaus. Geschlechtsabhängige Unterschiede nationaler Stereotypen. (Sex dependent differences of national stereotypes.) *Jb. Psychol. Psychother.*, 1956, 4, 263-296.—Differences in stereotypes of sexual role and national character were studied in a group of 881 German men and women, using a checklist of personality characteristics. Women showed greater agreement in stereotyping of Western nations, while men tended to show greater stereotyping agreement in relation to the more distant nations. No sharp sex differences in content were noted. Men gave their own sex more highly valued characteristics than they gave to the women; with women it was just the reverse.—E. W. Eng.

4089. Spindler, George D., & Spindler, Louise S. American Indian personality types and their socio-cultural roots. *Ann. Amer. Acad. pol. soc. Sci.*, 1957, 311, 147-157.—Indian tribes representing all the major cultural areas in North America, except the Southeastern Woodlands, appear to have at least these characteristics in common, subject to specific variations cited: nondemonstrative emotionality, control over interpersonal aggression, generosity, ability to endure pain and hardship without external evidence of discomfort, positive valuation of bravery, fear of witchcraft, institutionalized "practical joking," attention to the concrete realities of the present, and dependence upon supernatural assistance.—M. M. Berkun.

(See also Abstracts 3464, 3712, 4065, 4072, 4126, 4535, 4614)

SOCIAL INSTITUTIONS

4090. Appleby, Lawrence. The relationship between rigidity and religious participation. *J. Pastoral Care*, 1957, 11, 73-83.—200 Jewish college students were administered a Religious Participation Scale leading to "High," "Middle," "Low," and "Non-" religious participation groupings. A Rigidity Test was then given to the same groups. Statistical treatment of results indicate that: (a) no differences in rigidity were found between 'High' and 'Non-participant' religious groups; and (b) that 'Middle-low' religious groups were less rigid than the combined extremes. Theoretically, the data indirectly supported the concept of a generalized mental rigidity and indicated that the extremes in any ideology are equally dogmatic." 25 references.—O. Strunk, Jr.

4091. Bell, Wendell. Familism and suburbanization: One test of the social choice hypothesis. *Rur. Sociol.*, 1956, 21, 276-283.—83 of 100 recent movers to 2 Chicago suburbs gave as their reason for moving familistic considerations, i.e., the move

to the suburbs for them expresses an attempt to find a location in which to conduct family life which is more suitable than central cities. Other reasons: consumership 53, upward mobility 10, quest for community 73.—H. K. Moore.

4092. Benjamin, Richard. Some problems of voting technique in learned societies, trade unions and industrial co-partnership schemes. *Bull. Brit. psychol. Soc.*, 1957, 32 (Inset), 5.—Abstract.

4093. Chesser, Eustace. The sexual, marital and family relationships of the English woman. New York: Roy Publishers, 1957. xxxvi, 642 p. \$17.50.—This analysis of a survey conducted to determine the emotional attitudes of the English woman toward sex, marriage, and family life is organized into 5 parts: Problems and approach, Childhood, Single adult life, Married adult life, and Conclusions. 192-item bibliography.—A. J. Sprow.

4094. Clifford, Roy A. The Rio Grande flood: A comparative study of border communities in disaster. *Nat. Acad. Sci.-Nat. Res. Coun. Publ.*, 1956, No. 458 (Disast. Stud. No. 7). xv, 145 p.—This report presents data, general conclusions, emergent hypotheses, and recommendations derived from the analysis of more than 250 interviews obtained from individuals and organizations following the 1954 flood in the border communities of Eagle Pass, Texas and Piedras Negras, Coahuila, Mexico. Direct comparisons are made within and between the two communities of the actions of internal and external organizations, the individuals, responses to the flood situation, the relationships of informal groups and organizations, and the formal relations of national agencies of the respective governments.

4095. Coser, Rose Laub. The role of the patient in a hospital ward. *Dissertation Abstr.*, 1957, 17, 1834.—Abstract.

4096. Fliegel, Frederick C. A multiple correlation analysis of factors associated with adoption of farm practices. *Rur. Sociol.*, 1956, 21, 284-292.—Subjects were a random sample of 170 farm owner-operators in a Wisconsin county. Data were obtained by interviews. The practices were 11 recommended by the Extension service. The coefficient of multiple correlation between adoption of these practices and size of operation, authority with respect to decisions on farm matters, index of familism, contacts for information on farm matters, level of living index, and attitude toward farm practices was .57, which "indicated that a great deal of the variance in adoption (68%) remains to be accounted for." Suggestions are made.—H. K. Moore.

4097. Gettel, Gerhard Frederick. A study of power in a north central state community. *Dissertation Abstr.*, 1957, 17, 1620.—Abstract.

4098. Goode, William J. Community within a community: The professions. *Amer. sociol. Rev.*, 1957, 22, 194-200.—On the premise that a profession is a community within a community, viz., society sui generis, the author analyzes the professions with regard to two characteristics as a community: the socialization process and social control, and the influence of community attitudes upon client choice and prestige rankings of members of the profession.—G. H. Frank.

4099. London, I. D., & Poltoratzky, N. P. Contemporary religious sentiment in the Soviet Union. *Psychol. Rep.*, 1957, 3, 113-130.—Responses of 165 postwar Soviet emigres to 3 propaganda passages involving religious themes were examined for gross and subtle indices of religiosity by 4 Russians with intimate knowledge of the Soviet scene and with religious convictions ranging from highly positive to indifferent.—C. H. Ammons.

4100. Meister, Albert. Associations coopératives et groupes de loisirs en milieu rural. (Co-operative associations and recreational groups in a rural environment.) Paris: Les Editions de Minuit, 1957. 298 p. 1,000 fr.—550 cooperative associations and recreational groups in a rural area in Northern Italy were studied. An evaluation is made of the changes which have taken place in the structure of these groups during the last decades. It is found that rural depopulation, industrialization, and government intervention has led to deterioration of the cooperative movement. "Many groups have abandoned their cultural and educational aims . . . and have adopted the very methods and values they originally intended to fight." Considerable devotion to detail is given and constant references are made to the types of groups found in other countries. An attempt is made to generalize the findings.—A. Schaden.

4101. Meyer, Carol H. Complementarity and marital conflict: The development of a concept and its application to the casework method. *Dissertation Abstr.*, 1957, 17, 2082-2083.—Abstract.

4102. Moss, J. Joel. Newcomer family acceptance-rejection of the community and the process of assimilation. *Rur. Sociol.*, 1956, 21, 302-306.—Study of 2 southern boom towns revealed that family organization, family reception by a community, expectations of permanence, social participation, and the family's position in the assimilation process are related to the attitude a family takes toward the community.—H. K. Moore.

4103. Nelson, M. O., & Jones, E. M. An application of the Q-technique to the study of religious concepts. *Psychol. Rep.*, 1957, 3, 293-297.—An adaptation of the Q-technique was applied to the study of the Christian deity concepts of God and Jesus as compared with the parent concepts of mother and father. The correlations obtained for 16 Ss indicated: (a) that the deity concepts were more closely related to the mother concept than to the father concept for Ss investigated; and (b) that the adaptation of the Q-technique used may have value for further study of religious concepts.—C. H. Ammons.

4104. Nolan, Francena L. Relationship of "status groupings" to differences in participation. *Rur. Sociol.*, 1956, 21, 298-302.—In a Pennsylvania community centered about a village of 682 inhabitants, it was found that formal organizations serve different strata of society, depending to some extent upon the type of membership.—H. K. Moore.

4105. Strunk, O., Jr. A redefinition of the psychology of religion. *Psychol. Rep.*, 1957, 3, 138.—The following definition of the psychology of religion is offered: The psychology of religion is that branch of general psychology which attempts to understand, control and predict human behavior, both propi-ate and peripheral, which is perceived as being

religious by the individual, and which is susceptible to one or more of the methods of psychological science.—C. H. Ammons.

4106. Strunk, Orlo, Jr. A redefinition of the psychology of religion: With special reference to certain psychological theories of Gordon W. Allport. *Dissertation Abstr.*, 1957, 17, 2075-2076.—Abstract.

4107. Vinter, Robert Dewhirst, Jr. Social goals and social participation among urban lower class white males. *Dissertation Abstr.*, 1957, 17, 1835-1836.—Abstract

4108. Wolters, Gilbert. The human crop of a rural Catholic parish. *Rur. Sociol.*, 1956, 21, 297-298.—The people of this Kansas parish were characterized over a 40-year period as maritally inclined, maritally stable, inclined to larger families than the national average, attached to the land, educationally limited, strongly attached to the church, and non-migratory.—H. K. Moore.

(See also Abstracts 3916, 4029, 4063, 4270, 4286, 4297, 4538)

LANGUAGE & COMMUNICATION

4109. Albright, Robert W., & Albright, Joy Buck. The phonology of a two-year-old child. *Word*, 1956, 12, 382-390.—The utterances of a 26-months-old male child for a period of 2 hours were tape-recorded. The complete corpus of 232 utterances is presented in phonetic transcription. The consonant and vowel sounds and the alternations they exhibited are discussed systematically. Variability is probably a normal aspect of speech sound development.—J. B. Carroll.

4110. Back, K. W., Hill, R., & Stycos, J. M. Manner of original presentation and subsequent communication. *Psychol. Rep.*, 1957, 3, 149-154.—A field experiment on educational methods in family planning gave an opportunity to study the impact of the educational methods beyond the persons exposed to the programs. Group meetings and distribution of pamphlets were compared. It was found that: (a) motivation to talk about the meetings was greater than that to talk about the pamphlets, and (b) communication about the meetings tended to follow established channels. Communication about the pamphlets was directed toward those persons who could be changed most by applying the message in the pamphlets.—C. H. Ammons.

4111. Brown, Don. What is the basic language skill? Evidence from aphasia studies on the importance of auditory language. *Etc. Rev. gen. Semant.*, 1956-57, 14, 103-118.—An exploration of evidence from aphasia to its application in general semantics. Reference is made to the notion of auditing; the faculty of "comprehension of spoken language." "Auditing is the fundamental linguistic experience upon which the normal development of the other language skills depend. Cross-references are made to writings of Nielson, Freud and concepts are tied down to language behavior of the deaf as well as the aphasic.—F. Elliott.

4112. Freeman, Lucy. Mapping the unconscious. *Etc. Rev. gen. Semant.*, 1956-57, 14, 98-102.—Words in psychoanalysis are used to communicate between the patient's conscious and his unconscious.

Symbols, not words, are what are important. Psychoanalysis helps us discover the territory which the map represents.—F. Elliott.

4113. Goldstein, Michael Joseph. The relationship between coping and avoiding behavior and attitude modification. *Dissertation Abstr.*, 1957, 17, 2064.—Abstract.

4114. Graefe, Oskar. Strukturen der Rundfunkprogramm-Auswahl bei Hausfrauen. (Structure of radio program selection in housewives.) Münster, Westfalen, Germany: Aschendorffsche Verlagsbuchhandlung, 1958. viii, 172 p. 19.25 DM.—In an extensive study of radio listening preferences, the author explored the opinions and attitudes of 200 representative Westphalian housewives to 400 selected program titles. The results of a multiple factor analysis are considered in terms of listener types and program planning. Titles and categories are listed in the appendix. 12 of 15 references are to American publications.—H. P. David.

4115. Graham, R. Somerville. Widespread bilingualism and the creative writer. *Word*, 1956, 12, 370-381.—"Widespread bilingualism is applied here to a bilingualism which, due to economic and political pressures from another group, has spread to a large segment of a population." The effects of such bilingualism in Quebec are studied as they show themselves in French Canadian literature.—J. B. Carroll.

4116. Gudschinsky, Sarah C. The ABC's of lexicostatistics (glottochronology). *Word*, 1956, 12, 175-210.—A review and critique of lexicostatistics as a technique for measuring the time depth of languages, with emphasis on the methodology.—J. B. Carroll.

4117. Ham, Richard Errol. Certain effects on speech of alterations in the auditory feedback of speech defectives and normals. *Dissertation Abstr.*, 1957, 17, 1623-1624.—Abstract.

4118. Harbold, George J. Pitch ratings of voiced and whispered vowels. *USN Sch. Aviat. Med. Res. Rep.*, 1957, Proj. No. NM 18 02 99, Sub. 1, Rep. No. 67. ii, 18 p.—Voiced and whispered vowels were recorded, then paired within each respective speech type. 89 listeners responded to the paired signals by indicating which of each pair sounded higher in pitch. Data were treated by a paired comparisons method and rank order correlation. The results indicate that listener judgments of the relative pitch of both whispered and voiced vowels are not independent of the vowels themselves. There was also high correlation between rank orders of voiced and whispered speech types.

4119. Hatcher, Anna Granville. Syntax and the sentence. *Word*, 1956, 12, 234-250.—An attempt to "construct a set of semantic criteria for the analysis of sentence-meaning." Rather than using "reason for utterance" or "theme," the author proposes to use "point of view" of the predication as the basis for classification. This requires consideration of what a predication assumes as known, and hence of what types of questions a sentence can be assumed to answer.—J. B. Carroll.

4120. Herdan, G. Language as choice and chance. Groningen, Holland: P. Noordhoff, 1956. xiii, 356 p.—Contains four main sections: Stylostistics, Statistical Linguistics, Information Theory,

and Linguistic Duality, with a fifth section intended as an introduction to the elementary statistical theory needed in statistical linguistics. Presents a wide variety of analyses and interpretations bearing on such matters as: the efficiency of a language, word frequency and word length, phonemic-alphabetic discrepancies, quality of translation, statistical characterization of literary style, word length as related to concept range, and the changes in the German language under Nazism.—J. B. Carroll.

4121. Kyle, Helen Francis. Pitch of the voice in certain speaking and reading activities among elementary school children. *Dissertation Abstr.*, 1957, 17, 1511-1512.—Abstract.

4122. Lebow, Victor Samuel. A study of some personality factors associated with restructuring of attitudes. *Dissertation Abstr.*, 1957, 17, 2066-2067.—Abstract.

4123. Leslie, Robert C. Group experience and communication in interpersonal relationships. *J. Pastoral Care*, 1957, 11, 65-72.—Communication in groups takes place only after emotions are identified and handled in a direct and forthright fashion. Communication in groups takes place at different levels, but the more perceptive and understanding the individual the more apt is high-level communication made possible.—O. Strunk, Jr.

4124. London, I. D., & Anisimov, O. The Soviet propaganda image of the West. *Psychol. Rep.*, 1957, 3, 19-65.—The Soviet propaganda image of the West is explored in terms of fundamental themes and methods of projection, both of which are analyzed and illustrated in detail by direct reference to the Soviet press of the postwar decade.—C. H. Ammons.

4125. London, I. D., Poltoratzky, N. P., & Elagin, I. Why the success of the phrase "people's capitalism"? *Psychol. Rep.*, 1957, 3, 439.—The effectiveness of recent American propaganda is suggested as due to a complex of factors, such as use of a bold phrase, "people's capitalism," which translates effectively into Russian ("capitalism for the people") and utilizes a familiar Soviet propaganda formula.—C. H. Ammons.

4126. Peters, Robert W. A rating scale technique for the measurement of speaker intelligibility. *USN Sch. Aviat. Med. Res. Rep.*, 1957, Proj. No. NM 18 02 99, Sub. 1, Rep. No. 68. 8 p.—Measuring speaker intelligibility by listener ratings of voice samples on an equal-appearing intervals scale was evaluated for validity and reliability, and the effect of different signal-to-noise ratios upon mean scale values were determined. The results indicate that a reasonable estimate of speaker intelligibility may be thus obtained.

4127. Pickford, Glenna Ruth. American linguistic geography: A sociological appraisal. *Word*, 1956, 12, 211-233.—The author severely criticizes contemporary work in American dialect study for its shortcomings in matters of reliability, validity, and sampling and interviewing techniques, and for its failure to recognize sufficiently the role of urbanization, social class, and group affiliation.—J. B. Carroll.

4128. Pierce, J. R., & Karlin, J. E. Reading rates and the information rate of a human channel. *Bell Syst. Tech. J.*, 1957, 36, 497-516.—Measurements are obtained of the speed with which adults

can transmit information by reading printed words aloud. Effects of familiarity, word length, and size of the vocabulary from which the words are drawn, and manner of presentation (lists vs. prose or scrambled prose) are studied. It is concluded that at least 43 bits/sec. can be transmitted under certain conditions. Speed of word recognition appears to be a more severe limiting factor than the physiology of articulation. Implications for the problem of determining the rate of transmission for a satisfactory sensory input are discussed.—J. B. Carroll.

4129. Scott, E. M. Personality and movie preference. *Psychol. Rep.*, 1957, 3, 17-18.—154 Ss were given the MMPI and a forced-choice movie preference list. Rank order correlations were computed between personality components and movie preferences. Results seem to support the hypothesis that movie attendance is related, in some instances, to the central aspects of personality: (a) movie preferences serve as substitute outlets and (b) social values appear to determine the serious or less serious movie choice.—C. H. Ammons.

4130. Tolhurst, Gilbert C. The effects of disrupting the simultaneity of visual-aural communication channels to a speaker. *USN Sch. Aviat. Med. Res. Rep.*, 1956, Proj. No. NM 18 02 99, Sub. 1, Rep. No. 66. 10 p.—48 speakers received the messages they were to impart to listeners in a face-to-face situation. For 24 of them the aural-channel was delayed 0.23 second from that of the visual. The effect of dissynchrony of the aural-visual signals upon the speakers was not to change the intelligibility of speech or the sound pressure level of voice. There was a significant change, namely, lengthening the time of phrase duration.

(See also Abstracts 3639, 4291, 4340)

CLINICAL PSYCHOLOGY, GUIDANCE, & COUNSELING

4131. Angelino, Henry. Current trends in guidance services in the U.S.A. *Educ. & Psychol., Delhi*, 1956, 3(4), 27-41.—An account of the growth of guidance services in the U.S.A. is presented with emphasis on the early beginnings, the growth, and the current practices. There is a discussion of some unresolved problems, specifically those of creating and maintaining definite standards for the selection and training of guidance personnel. A summary of the major trends in the contemporary guidance activities is included. 26 references.—H. Angelino.

4132. Bingner, Janet L. Contributions of government agencies to the guidance movement. *Person. Guid. J.*, 1957, 35, 587-590.—The contributions of a number of government agencies to guidance and counseling are briefly reviewed. Agencies discussed are: Bureau of the Census, Bureau of Labor Statistics, Office of Education, Office of Vocational Rehabilitation, Veterans Administration, Department of Defense, Employment Service, and Woman's Bureau.—G. S. Speer.

4133. Brams, Jerome Martin. The relationship between personal characteristics of counseling trainees and effective communication in counseling. *Dissertation Abstr.*, 1957, 17, 1510-1511.—Abstract.

4134. Fanseworth, Dana L. Denial as a defense. *J. Pastoral Care*, 1957, 11, 36-37.—The idea that the main purpose of psychiatric treatment is to aid the patient to "adjust" (usually adjustment "downwards") is criticized. Mental health should "imply freedom from crippling conflicts and anxieties but not from conflicts and anxiety." Mental health should involve the raising of standards, not their deterioration.—O. Strunk, Jr.

4135. Kuromaru, Shoshiro. Rinshō shinrigaku no hōhōron-teki kōsatsu. (Some comments on the method of clinical psychology.) *Jap. J. educ. Psychol.*, 1956, 3, 236-241.—A consideration was made on the method of clinical psychology which is recently growing in Japan. It requires special technique as well as knowledge of general psychology. Besides psychological testings, the writer emphasizes the importance of real understanding of pathological mentality proposed by Jaspers. English summary, p. 247-248.—S. Ohwaki.

4136. Nemesch, Robert Benjamin. The status of privileged communication in the field of counseling, as compared with the fields of law, medicine, theology, and journalism. *Dissertation Abstr.*, 1957, 17, 1938.—Abstract.

4137. Parukh, S. K. Counseling psychology in the United States. *J. voc. educ. Guid.*, 1956, 3, 38-44.—A general article relating to the U.S.A. giving super's distinction between counseling and clinical psychology and emphasizing the Rogerian approach. Counselor training is discussed, the main problem being seen here as one of attitude vs. technique. Difficulties in research center upon criteria and measurement problems.—W. L. Barnette, Jr.

4138. Paterson, Donald G. The conservation of human talent. *Amer. Psychologist*, 1957, 12, 134-144.—The history of the application of psychological findings to problems of education, occupational adjustment, and social adjustment is reviewed. Data on occupational choices, social status of various occupations, dissatisfaction with life work, and related matters are presented. 2 case histories are outlined in fair detail. One of these is cited as "a concrete example of the kind of vocational counseling needed to conserve human talent in our society." The other illustrates "a general failure of our society, in the past, to recognize and to utilize 'better than average scholastic and mechanical aptitude' from the time he left school at the turn of the century to the time of a national emergency." Problems involving resistance to hiring properly qualified, physically handicapped persons, failure to utilize the ever increasing number and proportion of older persons in our society, and widespread minority group discrimination are discussed. Emphasis is placed on the role of educational and vocational counseling in reducing and preventing occupational counseling in reducing and preventing occupational maladjustment in our society.—S. J. Lachman.

4139. Patterson, C. H. Counseling the emotionally disturbed. New York: Harper, 1958. xvii, 458 p. \$6.00.—This text is designed for use in training those who would work in the vocational rehabilitation of the emotionally disturbed, as provided for by Public Law 113. Vocational rehabilitation is one part of the total rehabilitation process; medical treatments and psychotherapy are other parts. After

introductory chapters relative to emotional disturbance and available rehabilitation services, the desirable characteristics of rehabilitation counselors are noted, and the manner in which they should be developed is described. Apparently the rehabilitation counselor needs relatively less skill in psychotherapy and relatively more skill in appraisal of aptitudes and knowledge of educational and vocational opportunities, compared with the clinical psychologist. A lower level worker, the psychological counselor, is also described. Criteria for selection of clients on the basis of need and feasibility are detailed. Counseling and follow-up procedures are given extensive treatment.—S. S. Marzolf.

4140. Russo, Salvatore. Clinical psychology as the treatment of symptoms. *Etc. Rev. gen. Semant.*, 1956-57, 14, 119-126.—A semantic analysis of the concept of symptom, its role in behavior, psychotherapy and the relationship of cause and effect. The author takes the position that "illness is an abstraction, and its attributes, or its manifestations as symptoms are the only reality . . . we must treat the reality that presents itself rather than the abstraction . . ." (which it is theoretically supposed to represent).—F. Elliott.

4141. Tyler, Leona E. Counseling. *Annu. Rev. Psychol.*, 1958, 9, 375-390.—Counseling as a process is emphasized in this review which covers material published between April 1956 and April 1957. 86-item bibliography.—A. J. Sprow.

4142. Weinberg, George Henry. Clinical versus statistical prediction with a method of evaluating a clinical tool. *Dissertation Abstr.*, 1957, 17, 1602-1603.—Abstract.

4143. Wright, Fred Holmes. An evaluation of the candidate employee program in the rehabilitation of psychiatric patients. *Dissertation Abstr.*, 1957, 17, 1604.—Abstract.

(See also Abstract 3572)

METHODOLOGY, TECHNIQUES

4144. Azorin, Louis A. Karen Horney on psychoanalytic technique: The analyst's personal equation. *Amer. J. Psychoanal.*, 1957, 17, 34-38.—The paper is derived from Horney's lectures on technique. The author discusses the desirable qualities in a good analyst, the psychological difficulties inherent in analytic work, the analyst's own personality difficulties, and the steps analysts can take to change their liabilities into assets.—D. Prager.

4145. Blenkner, Margaret. Predictive factors in the initial interview in family casework. *Dissertation Abstr.*, 1957, 17, 2061-2062.—Abstract.

4146. Brickenkamp, Rolf. Zur inhaltlichen Gliederung der Anamnese. (Anamnestic content sequence.) *Diagnostica*, 1957, 3, 11-16.—The author discusses varied approaches on how to conduct an anamnestic interview and offers a suggested outline form.—H. P. David.

4147. Cantor, Morton B. Karen Horney on psychoanalytic technique: The initial interview: Part I. *Amer. J. Psychoanal.*, 1957, 17, 39-44.—This paper is based on Horney's lectures on psychoanalytic technique. The initial interview can be analysis as much as any other analytic hour. The therapist

arrives at a diagnosis and prognosis through intuition, first general observations, and areas of specific observations. The patient's attitude toward analysis is ascertained through noting his incentive and his reservations.—D. Prager.

4148. Carlson, Carol R., & Rothney, John W. M. An examination of a method for evaluating counseling. *Personn. Guid. J.*, 1957, 35, 584-586.—In an attempt to develop criteria for evaluating the responses of students to a questionnaire, 10 judges rated items on 50 questionnaires. It was concluded that only the ratings of responses to factual questions could be justified as criteria in evaluating the effects of counseling.—G. S. Speer.

4149. Daumezon, G., & Lairy, G.-C. Dynamique du rythme Alpha en psychopathologie. (Dynamics of the Alpha rhythm in psychopathology.) *Ann. méd. psychol.*, 1957, 1, 35-51.—In psychiatry, the study of correlations between the nature of brain waves and problems of nosology have been disappointing. The authors, however, after giving several EEGs to severely disturbed patients, feel that a careful scrutiny of the changes in Alpha rhythm during such a series of waves reveals a particular pattern for each patient. This pattern, reflecting the patient's mode of adaptation to the clinical situation could complement usefully the psychiatric examination. 19 references.—M. D. Stein.

4150. Greenhill, Maurice H. Interviewing with a purpose. *Amer. J. Nurs.*, 1957, 56, 1259-1262.—The author considers interviewing as a goal-directed method of communication. He analyzes the rationale for interviewing, the setting for the interview, initiating and maintaining goal direction, and the limitations to be placed upon the interview. Some principles that form the foundation for verbal techniques in interaction are given with a discussion of each.—S. M. Amatora.

4151. Jennings, Daniel E., Jr. The social worker in a military setting. *Soc. Casewk.*, 1957, 38, 246-250.—"By rather briefly outlining a military social worker's duties in one particular assignment in an army general hospital, this paper has attempted to illustrate some of the situations that arise when one practices professional social work in a military setting. Such a setting offers a challenge to young graduates of social work schools who subsequently enter military service. They must be prepared to adapt their basic knowledge and techniques of social work practice to the requirements of the military environment."—L. B. Costin.

4152. Kogan, Leonard S. The short-term case in a family agency: Part I. The study plan. *Soc. Casewk.*, 1957, 38, 231-238.—Describes a research study designed to increase the knowledge and understanding of short-term cases: their origin, nature, and effectiveness of service rendered. Following a description of the general design of the study, the author tells how cases were selected, controlled, and followed-up.—L. B. Costin.

4153. McMullin, John F. The functions of the naval neuropsychiatric treatment center. *U. S. Armed Forces Med. J.*, 1957, 8, 91-102.—Naval neuropsychiatric treatment centers have been in existence only since 1948. Prior to that date, provisions for care of psychotic patients were made with Federal institutions outside of the Navy. The historical de-

velopment over 9 years of the two 400-bed treatment centers is described, and the current treatment facilities, patient population, and teaching aspects of the program are detailed.—G. H. Crampton.

4154. Saul, Leon J. The psychoanalytic diagnostic interview. *Psychoanal. Quart.*, 1957, 26, 76-90.—An outline is presented to guide the psychoanalytic diagnostic interview to facilitate penetrating quickly to the major traumatic influences in the patient's life. Topics covered include anamnestic data, conscious attitudes, unconscious associative material, interviews with relatives and others, and psychological tests. 18 references.—L. N. Solomon.

4155. Shagass, Charles; Mihalik, Joseph, & Jones, Arthur L. Clinical psychiatric studies using the sedation threshold. *J. psychosom. Res.*, 1957, 2, 45-55.—The data collected consisted of 89 sedation threshold determinations obtained from 40 psychiatric patients, of whom 37 were only once retested. Analysis of the data indicated that the threshold had high reliability and that changes therein reflected significant clinical changes. "Where significant improvement occurred, abnormally high thresholds definitely decreased." This finding makes the test "of potential value as an objective index of therapeutic effectiveness. The results also indicated that the threshold is not fixed and that it reflects affective disturbance rather than enduring personality factors." 3 patients were given 15 tests and are described in detail.—L. A. Pennington.

4156. Shyne, Ann W. What research tells us about short-term cases in family agencies. *Soc. Casewk.*, 1957, 38, 223-231.—After reviewing the findings of the Family Service Association of America's survey of short-term cases, the author describes in detail some characteristics of short-term cases as observed in several agencies. These findings are based on observations made after the 1948 Family Service Survey. Cases terminating with only one interview seem to consist of at least three kinds of clients: (1) those for whom service is completed within one interview, (2) those directed elsewhere for service, and (3) those who seem to need casework but break off contact.—L. B. Costin.

4157. Sines, Lloyd K. An experimental investigation of the relative contribution to clinical diagnosis and personality description of various kinds of pertinent data. *Dissertation Abstr.*, 1957, 17, 2067-2068.—Abstract.

4158. Sullivan, Joseph D. Psychiatric participation in a rehabilitation center. *Psychiat. Quart. Suppl.*, 1956, 30, 257-263.—The author expresses some of his thoughts on the development of an outpatient rehabilitation center for those who have suffered from psychiatric disability and who require further social and vocational integration. Medical, vocational, and social adjustment services operate together as the rehabilitation team. Intake requires very careful attention. Great responsibilities are placed upon psychologists and case workers in therapy. Consultation and supervision are offered by the psychiatrists. The paramount importance of the gifted teacher in a rehabilitation program is stressed.—D. Prager.

4159. Vernon, William Henry Dalton. A psychological study of thirty residents of a small

town. *Dissertation Abstr.*, 1957, 17, 2068-2069.—Abstract.

(See also Abstracts 3499, 4078, 4101, 4492)

DIAGNOSIS & EVALUATION

4160. Allen, Robert M. **Personality assessment procedures: Psychometric, projective, and other approaches.** New York: Harper, 1958. xi, 541 p. \$6.00.—A survey of techniques used for evaluating personality with reviews of their rationale, applicability, format, research findings, and strengths and weaknesses. Designed as a reference for students and practitioners, the text's six parts deal with an overview of test problems, psychometric methods, projective procedures, physical, chemical, and physiological methods, life situation as a method of personality assessment, application of personality tests, and ethics of the profession. 35-page bibliography.—A. F. Greenwald.

4161. Auld, Frank, Jr., & Mahl, George F. **A comparison of DRQ with ratings of emotion.** *J. abnorm. soc. Psychol.*, 1956, 53, 386-388.—"In order to appraise the validity of the DRQ as a measure of tension, the authors compared DRQ scores of 39 psychiatric interviews with global ratings of the same interviews on anxiety, hostility, and dependence. There were small positive correlations between the global ratings and the DRQ, these correlations tending to be higher for the women than for the men. If the global ratings can be accepted as adequate measures of tension, the DRQ does not measure individual differences in tension very well."—A. S. Tamkin.

4162. Aumack, L. **The Szondi: Internal or external validation?** *Percept. Mot. Skills*, 1957, 7, 7-15.—A general methodological criticism has been leveled against those research efforts which have attempted to validate the Szondi by use of various internal criteria. In contrast, it has been argued that only by the utilization of external criteria of validation will it be possible to salvage what appears to be a potentially fruitful method of personality study for the subsequent solution of clinical rather than academic problems. A general research program oriented toward external rather than internal criteria of validation is proposed.—C. H. Ammons.

4163. Bendien, J. **De Rorschach als instrument bij het onderzoek van psychische heredititeit.** (The Rorschach Test as instrument for the study of psychological heredity.) *Ned. Tijdschr. Psychol.*, 1957, 12, 97-128.—In order to study the influence of heredity on certain personality factors as expressed in the Rorschach Test, protocols of groups of siblings, married couples, parents-children, and unrelated subjects were searched for unusual responses with similar content. Striking similarities in formal characteristics as well as in specific content, which seem to support the hypothesis of psychological heredity, could only be found, however, in a comparison of the Rorschach records of a pair of identical twins. This is supported by additional, clinical evidence.—R. H. Houwink.

4164. Bieliauskas, Vytautas J. **Scorer's reliability in the quantitative scoring of the H-T-P technique.** *J. Clin. Psychol.*, 1956, 12, 366-369.—The H-T-P was given to 43 college students in psy-

chology classes. The drawings were scored by 3 experienced graduate students to obtain the 4 estimates of IQ from the test. Interjudge agreement was higher on IQ's computed from the Net Weighted Score and the Good Score than from the % Raw G and Flaw Score; the former tended to be in the high .80s, the latter in the low .70s. The mean IQs obtained by different judges or by the same judge from different measures appear quite different; they range from 108 to 123 for the same people. It would appear that scoring procedures or directions need revision.—L. B. Heathers.

4165. Bolin, B. J., Schneps, Ann, & Thorne, W. E. **Further examination of the tree-scar-trauma hypothesis.** *J. clin. Psychol.*, 1956, 12, 395-397.—"Tree drawings were obtained from each of 51 hospitalized mental patients and 31 non-patients. Each subject was induced to mark the tree 'where lightning had struck at some time in the past' and to locate chronologically the 'worst event' of his life. No significant correlation was found between the relative height of the 'lightening scar' on the tree and the relative age of the 'worst event.' These two groups' 'scar' placement was not significantly different from 39 psychotic subjects' random placement of X-marks on prepared (duplicated) tree drawings."—L. B. Heathers.

4166. Bound, Mae Matthisen. **A study of the relationship between Witkin's indices of field dependency and Eysenck's indices of neuroticism.** *Dissertation Abstr.*, 1957, 17, 2062-2063.—Abstract.

4167. Brown, D. G., & Tolor, A. **Human figure drawings as indicators of sexual identification and inversion.** *Percept. Mot. Skills*, 1957, 7, 199-211.—A critical review indicates that there is no convincing evidence that adequacy of psychosexual identification or adjustment is reflected in the choice of sex in the drawing of human figures. At the present time, the only valid conclusion is that the basis or significance of drawing a person of the opposite sex first is not known.—C. H. Ammons.

4168. Caldwell, Mark B., & Davis, Julian C. **A short form of the Wechsler Intelligence Scale Form II for a psychotic population.** *J. clin. Psychol.*, 1956, 12, 402-403.—W-B II was given to 85 unselected hospitalized psychotics. Records were also available for 53 normals selected at random from a student tested group. For each group Full Scale IQs were correlated with pro-rated IQs based on Voc, Inf, BD, and Sim. In pro-rating both the usual 2.5 multiplier and the 2.7 multiplier suggested by Kriegman and Hansen were used. For both groups the correlations between the full and the short scales were in the .90s. Using 2.7 instead of 2.5 had no effect on the correlations obtained.—L. B. Heathers.

4169. Clancy, David Dana. **The relationship of positive response bias or acquiescence to psychopathology.** *Dissertation Abstr.*, 1957, 17, 2054-2055.—Abstract.

4170. Cleland, Robert Scott. **An investigation of the relationship between creative human and authoritarianism.** *Dissertation Abstr.*, 1957, 17, 2055.—Abstract.

4171. De Groot, A. D. **Kanttekening bij Szondi.** (Marginal note to the Szondi Test.) *Ned. Tijdschr. Psychol.*, 1957, 12, 142-146.—A rejoinder to Vuyk's

article (see 31: 6142), criticizing the assumptions underlying the Szondi Test and the lack of statistical elaboration.—R. H. Howdink.

4172. Delay, Jean; Pichot, P., Lemperière, T., & Perse, J. **Le test de Rorschach dans le psychosyndrome organique.** (The Rorschach test in an organic psychosyndrome.) *Rev. Psychol. appl.*, 1956, 6, 247-287.—Studies dealing with the use of Rorschach in determining type and intensity of organicity are critically reviewed and compared. The Rorschach is found to be particularly sensitive to the diagnosis of an organic psychosyndrome having a triad of symptoms: memory difficulties, wandering attention and emotional incontinence. 34 references.—W. W. Wattenberg.

4173. Enke, Helmut, & Hiltmann, Hildegard. **Die projektiven Test-Verfahren und ihre Bedeutung für die Psychosomatik.** (The projective techniques and their importance for psychosomatics.) *Z. Psycho-som. Med.*, 1956, 2, 199-204.—A chart of 10 projective techniques gives their characteristics; their values, use in batteries, and the necessity to combine them with biographic analytic method are discussed. 73-item bibliography.—E. Katz.

4174. Essman, W. B. **Manifest anxiety and test performance.** *Percept. Mot. Skills*, 1957, 7, 214.—Recent work with the Taylor Scale of Manifest Anxiety has suggested the possibility that the scale may identify groups of different intellectual ability. 45 introductory psychology students were given the Taylor scale. The mean difference between groups in Ohio State Psychological Examination scores was not significant, although the mean of the low-anxiety group was slightly higher. Perhaps intellectual differences do not appear between high- and low-anxiety groups when the population is relatively homogeneous. It is suggested that the precise nature of specific performance tasks be investigated for particular identified levels of anxiety in order to determine the consistency of the assumptions of the scale and related performance characteristics.—C. H. Ammons.

4175. Figueras, Aniceto. **El "test" del interior del cuerpo de C. Downing Tait and R. C. Asher.** (The Inside-of-the-Body Test of C. Downing and R. C. Asher.) *Acta neuropsiquiat. Argent.*, 1956, 2, 251-259.—An unspecified number of patients were asked to "draw the insides of someone with all their organs" as one of a series of draw-a-person-type-tests. Drawings of 9 cases with brief diagnoses, background and interpretations are given. The test was found to be useful diagnostically, particularly in hypochondria, psychosomatic and organic illnesses. English summary.—L. e. G. Datta.

4176. Flas, R. **Le test des pyramides de couleur de M. Pfister.** (Pfister's colored-pyramids test.) *Bull. Orient. scol. profess.*, 1957, 6, 104-119.—A study of the test, which consists of covering a pyramid with a box made of colored papers selected by the subject. General significance, scoring, interpretation from standpoint of personality.—R. Piret.

4177. Graumann, Carl-Friedrich. **Zur Phänomenologie des Testverfahrens.** (Phenomenology of the testing procedure.) *Z. exp. angewand. Psychol.*, 1956, 4, 173-192.—4 aspects of the testing procedure are discussed: (1) tests are used in a situation which requires the classification of a person into a certain group according to the characteristics of

the group; (2) the testing procedure, outlined in operational definitions, follows the same criteria as procedures in natural sciences: objectivity, exactness, control and predictability; (3) the knowledge which we can draw from such a procedure, therefore, is limited by the assumptions upon which the procedure is based and upon the probability of occurrence; (4) the actions of both tester and subject are determined by the test procedure, there is no room for a meeting of both on a personal level. English and French summaries.—W. J. Koppitz.

4178. Himmelstein, P. **A comment on the use of the abbreviated WAIS with homeless men.** *Psychol. Rep.*, 1957, 3, 440.—Although Levinson's obtained correlation (.87) indicates that the abbreviated WAIS is useful, it is lower than other correlations reported in the literature (which range from .93 to .96). There would seem to be no a priori reason for the short form to be less effective with homeless males than with disturbed hospitalized patients or with normals. The reason for the discrepancy is not apparent from Levinson's note (see 32: 4189).—C. H. Ammons.

4179. Hirt, Michael. **Validation of the Grassi block Substitution Test for measuring brain pathology.** *Proc. Iowa Acad. Sci.*, 1956, 63, 627-633.—Groups of normals, diagnosed organics, and diagnosed functional psychotics were given the Grassi Block Test. Non-overlapping distributions of scores were obtained for the normal and organic groups, but the functional psychotic group overlapped both. Wide intelligence variation characterized the subjects, and intelligence correlated highly with Grassi scores, but with it controlled a partial correlation of .80 between clinical classification and Grassi scores was obtained. Age and sex were unrelated to Grassi scores. Possible explanations of non-discrimination of the functional psychotic group is offered.—C. F. Haner.

4180. Höhn, Elfriede. **Studien zur Systematik der projektiven Methoden.** (Studies in the systematic use of projective tests.) *Jb. Psychol. Psychother.*, 1956, 4, 323-338.—Each of the different kinds of projective tests puts the subject in a different kind of situation, and the responses of the subject must be understood in the context of each kind of situation. There are tests of figure formation and tests of perception, verbal and non-verbal tests, more or less structured tests, and tests with alternative choices. The variety of situations set up by different tests makes it necessary to use a number of tests to secure a more global understanding of each subject.—E. W. Eng.

4181. Honigsmann, John J., & Carrera, Richard. **Another experiment in sample reliability.** *Stwest J. Anthropol.*, 1957, 13, 99-102.—The second card of the Behn-Rorschach set did not discriminate significantly between white college students and Attawapisket Indians on 8 categories of response, although discrimination was better than between a random and an opportunistic sample of the Indians. Use of the complete set of Behn cards is suggested.—M. M. Berkun.

4182. Jacobs, Mildred O. **A validation study of the oral erotic scale of the Blacky Pictures Test.** *Dissertation Abstr.*, 1957, 17, 1811-1812.—Abstract.

4183. Jamplosky, Pierre. L'échelle "d'anxiété manifeste" de Taylor et son utilisation expérimentale. (Taylor's Scale of "manifest anxiety" and its experimental use.) *Année psychol.*, 1956, 56, 91-99.—Criticism is leveled at the assumptions underlying this test comprising certain neurotic indices of the MMPI. The experimental work based on these assumptions reveals an astonishing naiveté. 26 references.—G. Rubin-Rabson.
4184. Jessor, Richard, & Hammond, Kenneth R. Construct validity and the Taylor Anxiety Scale. *Psychol. Bull.*, 1957, 54, 161-170.—"The intent of this paper has been to emphasize the directive role of theory in the construction of psychological tests." The several methodological issues arising from the use of theory in test construction are illustrated through a critical examination of the Taylor Anxiety Scale. "Our conclusion was that the A scale has only a tenuous, theoretical and empirical coordination to the Hullian construct of drive." 31 references.—W. J. Meyer.
4185. Karson, Samuel, & Freud, Sheldon L. Predicting psychiatric diagnoses with the MMPI. *J. clin. Psychol.*, 1956, 12, 376-379.—Experienced ($N=9$) and inexperienced ($N=6$) judges were given 35 MMPI profiles to classify into 8 specified diagnostic categories. One of these was a faked normal record; the remaining were records of hospitalized mental patients who had received the same diagnosis 3 times. . . . It was found that all 9 of the experienced judges and 4 of the 6 inexperienced judges were able to predict psychiatric diagnosis of the .01 level of confidence or better. Nevertheless, when comparing the performances of both groups as a whole, it was found there was a significant difference in favor of the experienced group in its ability to predict more accurately and also to make significantly fewer idiosyncratic selections. These results notwithstanding, it was also determined that none of the judges succeeded in predicting more accurately than could be done simply by sorting the profiles according to the highest abnormal T scale score.—L. B. Heathers.
4186. Kelly, George A. The theory and technique of assessment. *Annu. Rev. Psychol.*, 1958, 9, 323-352.—A survey of the literature to May 1957. 315-item bibliography.—A. J. Sprow.
4187. Knight, W. R., & Hall, J. F. Use of a cartoon-type projective technique in measuring attitudes toward psychology. *Percept. Mot. Skills*, 1957, 7, 25-28.—The need for an instrument to measure the college student's respect for psychology as a science and as a profession led to the development of a cartoon-type projective technique. After preliminary work, 20 items were selected for the test and standardized scoring instructions were developed. Responses by 2 samples of 70 and 86 students yielded split-half reliabilities of .86 and .77. Partial validity of the test was revealed by the test's successfully differentiating between students majoring in psychology and non-majors.—C. H. Ammons.
4188. Kraus, Anthony R. Shifts in the levels of operating defenses induced by blurring of inkblot slides. *J. clin. Psychol.*, 1956, 12, 337-341.—Zulliger ink blots were presented first maximally blurred and then clearly to 30 student nurses who had taken the Harrower-Erickson previously and to 54 others who had not had the Rorschach. For both groups R and A were reduced while V, CF and C and "blocked" M particularly, but also M, were greater under the blurred than under the clear conditions.—L. B. Heathers.
4189. Levinson, B. M. Use of the abbreviated WAIS with homeless men. *Psychol. Rep.*, 1957, 3, 287.—The Doppelt abbreviated WAIS scale is a useful short cut in estimating the intelligence of homeless men as a group. It, however, falls short in predicting the individual IQ score.—C. H. Ammons.
4190. Levitt, E. E. Ecological differences in performance on the Children's Manifest Anxiety Scale. *Psychol. Rep.*, 1957, 3, 281-286.—Scores on the Children's Manifest Anxiety Scale for 322 Chicago children in Grades 4, 5, and 6, were compared with those for children in Iowa City and Syracuse schools. Results varied significantly among rural, suburban, and city children. Reliability for the 3 samples lies in the range .85-.90 for the A scale and .60-.70 for the L scale. It is concluded that the data emphasize the importance of considering geographical location of criterion samples in the development of norms.—C. H. Ammons.
4191. Lienert, Gustav A. Ein statistisches Konzept zur präzisen und rationellen Interpretation von Testprofilen. (A statistical concept for precise and efficient interpretation of test-profiles.) *Z. exp. angewand. Psychol.*, 1956, 4, 319-333.—Unless one is willing to make concessions, it is quite difficult to find significant differences in test-profiles if the confidence interval is used to determine whether 2 tests are really different. The standard error of profile difference was found to be a more effective index than the confidence interval. From the standard error of profile difference the new concept of "critical difference" d_{crit} was developed and its efficiency demonstrated with the IST-Amthauer (intelligence) test. English and French summaries. 19 references.—W. J. Koppitz.
4192. Lorand, Rhonda L. Family drawings and adjustment. *Dissertation Abstr.*, 1957, 17, 1596.—Abstract.
4193. Lorr, Maurice; Holsopple, James Q., & Turk, Elizabeth. A measure of severity of illness. *J. clin. Psychol.*, 1956, 12, 384-386.—An attempt was made to devise a scale to measure severity of mental illness. Initially, 2 samples—Ns of 20 and 18—were selected from 2 different VA mental hygiene clinics; each sample contained only extreme cases—those judged by their therapists to be only mildly ill or to be severely ill. The Ss were then given the Multi-dimensional Scale for Rating Psychiatric Patients (MSRPP). 14 items differentiated both groups completely. Biserial rs are reported between each of these items and the illness rating using the standardization group. As a cross-validation 49 Ss from two other VA clinics were rated by their therapists on the MSRPP and then for severity of illness. The r between 4 categories of severity of illness and the total score on the 14 items was .70 for this group, but 7 of the original 14 items no longer had significant biserial rs with the illness rating.—L. B. Heathers.
4194. MacMillan, A. M. The Health Opinion Survey: Technique for estimating prevalence of psychoneurotic and related types of disorder in

communities. *Psychol. Rep.*, 1957, 3, 325-339.—A questionnaire-survey test has been developed for screening neurotic individuals from a general population. Results are reported for 559 white adults in a two-county rural area and 78 diagnosed hospital neurotics in a nearby city. Using a score weighting method based on a discriminant function analysis of a portion of the community responses, 25% of the 419 Ss scored low (indicating poor health), as compared to 92% of the neurotic group. Subsequent independent validation evidence indicated that the test holds promise as a screening instrument.—C. H. Ammons.

4195. Meyer, Henriette H. *Das Weltspiel: Seine diagnostische und therapeutische Bedeutung für die Kinderpsychologie.* (The world game: Its diagnostic and therapeutic importance for child psychology.) *Schweiz. Z. Psychol. Anwend.*, 1957, Suppl. No. 32, 1-43.—The world game is described as a projective, psychodiagnostic procedure. It provides a reliable basis for the recognition and determination of deeper layers in the personality of children. The diagnostic part of the world game, called the world test, may be combined with psychotherapy as the world technique. The play situation develops into a spontaneous, liberating and pleasurable activity in which creativity is expressed and becomes observable. By way of case material it is shown that archetypal figures, e.g., witch, serpent, magician, old wise man, etc., are present in the unconscious of the child and how they come to expression in the child's world picture. Free choice of material is given to the child in each therapeutic play session. Emotions break out but decrease in intensity during the course of treatment, and the child acquires a better adaptation to outer reality.—J. W. House.

4196. Moor, L. *La pratique des tests mentaux en psychiatrie infantile.* (The method of mental tests in child psychiatry.) Paris: Masson, 1957. 208 p.—First part of this book comprises principles of psychometric examination and the comprehensive catalogue of 60 most useful tests of the development for pre-school children, of general intelligence for children of 5 years and more, of perceptive-motor tests, of the language level, of the school level, of drawing, of personality, and of motor level. The description of every test includes materials, distributor, administration, indications, bibliography, advantages, and disadvantages. Second part deals with measures to be taken in various clinical situations such as learning difficulties, false debility, etc., and explains the method of psychological profiles. Third part contains the list of instruments necessary for a psychologist working in the child psychiatry, addresses of distributors of psychometric materials in France, Belgium, Canada, and Switzerland, the bibliography of French journals of interest for clinical child psychologist, and the list of libraries in Paris.—M. Chojnowski.

4197. Morgan, Patricia K., & Gaier, Eugene L. *The direction of aggression in the mother-child punishment situation.* *Child Developm.*, 1956, 27, 447-457.—Describes the development of a new projective test—the Picture Situations Index. Its purpose is to assess the direction of aggression in the mother-child punishment situation, and consists of

two sets of 10 cards each, one for boys and one for girls, which depict common situations often leading to punishment. Subjects of this study were 24 fourth, fifth, and sixth grade children and their mothers. The major conclusion drawn from the data was: "... merit of [the test] ... lies not in the 'validity' of the responses as such, but in the finding that mother and child view [the mother-child situation] from a different frame of reference."—F. Costin.

4198. Mori, G. F., Ronchi, L., & Zoli, M. T. *Contributo alle studio dell' influenza del controllo visivo sulle manifestazioni dell' tendenze mio-cinetichli.* (Contributions to the study of the influence of visual control on the manifestation of the myokinetic tendency.) *Atti. Fond. Ronchi*, 1957, 12, 259-267.—According to the Miray Lopez test, one draws parallel and regular zig-zag lines with each hand, in various directions, particularly towards and away from oneself. Comparisons are made between such tasks when performed with visual control, that is when observing ones hand, and without visual control.—T. Shipley.

4199. Murphy, Mary Martha. *A Goodenough Scale evaluation of human figure drawings of three non-psychotic groups of adults.* *J. clin. Psychol.*, 1956, 12, 397-399.—"The Goodenough Draw-A-Man Test and a formalized intelligence scale were administered to a group of hospitalized chronic alcoholics, a group of job applicants, and a group of institutionalized mental defectives. . . . No statistically significant differences were disclosed in average Goodenough scores of the three groups." The Goodenough scores correlated quite differently with ability measures on the three groups. The *r*'s were .78 with Form L IQs on the defectives; .31, .24, and .30 for W-B V, P, and Full Scale IQs, respectively, on the alcoholics; .04 with W-B Voc on the normals.—L. B. Heathers.

4200. Pasewark, Richard Arthur. *The use of finger paintings in differentiating epileptics and paranoid schizophrenics: An evaluation of the identification hypotheses underlying the Szondi Test.* *Dissertation Abstr.*, 1957, 17, 1814.—Abstract.

4201. Pasto, Tarmo A., & Kivisto, Paul. *Group differences in color choice and rejection.* *J. clin. Psychol.*, 1956, 12, 379-381.—"Two hundred and forty subjects were tested as to color preference on Rorschach card X and a color chart. The subjects were grouped into: (1) male and female, (2) normal, (3) psychotics, (4) mental defectives. Blue and red were the popular choices among all the groups; gray and brown were the colors most rejected. Normal women shifted their preferences more than normal men. The psychotics were characterized by a greater range of color choice and rejection. The mental defectives rejected yellow more than the other groups."—L. B. Heathers.

4202. Reitan, Ralph M. *The comparative effects of placebo, ultran and meproamate on psychological test performance.* *Antibiotic Med.*, 1957, 4, 158-165.—Doses four times the clinically recommended dose resulted in impaired performance as measured by the tests used. At dosage just above the clinically recommended dose showed no difference between the placebo or either drug that might not be attributed to chance variation.—G. K. Morlan.

4203. Ringger, H. J. Der Szondi-Test im psychotherapeutischen Spiel. (The Szondi-Test in play therapy.) *Schweiz. Z. Psychol. Anwend.*, 1957, 16, 262-276.—The relationship between the drive profiles of the Szondi test and children's play is demonstrated. The first six play therapy hours and test profiles of a boy and a girl, both eight years old, serve as examples. The profiles were obtained immediately after each play session. The tendencies and needs, as they appear in the foreground profiles, in the theoretical and experimental background profiles, are compared with the play events during the preceding sessions and are shown to be the determining forces of the play. The Szondi test seems to be a useful aid to the psychotherapist. The test makes it possible to put diagnosis and therapy on a more secure basis of observation and understanding. English and French summaries.—J. W. House.

4204. Seyfried, Helmut. Unauffällige und schwererziehbare Knaben im Farbpseudotest (nach Max Pfister). (The color-pyramid-test of unobstructive and educationally difficult boys.) *Z. exp. angewand. Psychol.*, 1956, 4, 245-273.—The only difference between the test-performance of the experimental group of 70 boys from an industrial school, and the control group of 45 boys designated by their teachers as average, was found in the tendency to arrange the color patches in a pattern. The maladjusted boys showed a significantly higher percentage of unordered designs. English and French summaries. 28 references.—W. J. Koppitz.

4205. Sinick, Daniel. Two anxiety scales correlated and examined for sex differences. *J. clin. Psychol.*, 1956, 12, 394-395.—"An r of .43 is reported between the Taylor Manifest Anxiety Scale and the Test Anxiety Questionnaire devised by Sarason and Mandler. The population sample consisted of 161 male and 50 female college students. For males alone the r is .45, for females .35. On each of the scales the female mean was significantly higher than the male mean."—L. B. Heathers.

4206. Truuma, Aare. The effect of masculinity on projection as elicited by male and female figures and situations. *Dissertation Abstr.*, 1957, 17, 1601.—Abstract.

4207. Van Hove, W. Praktijkervaringen met de C. A. T. en met het C. A. T. supplement. (Practical experiments with the C. A. T. and C. A. T. supplement.) *Tijdschr. Studie- Beroepsoriënt.*, 1957, 4, 60-63.—A study of 2 cases of children examined with the C. A. T. and its supplement. Practical conclusions. French summary.—R. Piret.

4208. Voas, R. B. Personality correlates of reading speed and the time required to complete questionnaires. *Psychol. Rep.*, 1957, 3, 177-182.—260 Naval Aviation Cadets were timed without their knowledge while taking the MMPI and Guilford-Zimmerman Temperament Survey. The time required to complete the MMPI correlated .72 with the time required to complete the GZ. It was concluded that individuals demonstrate consistency in the time required to complete personality inventories. This time was found to be primarily related to reading speed and intelligence. There was a slight tendency for fast readers to give less maladjusted responses on the MMPI.—C. H. Ammons.

4209. Wells, Stephen. The relationships between real and apparent movement and Rorschach form perception. *Dissertation Abstr.*, 1957, 17, 1817-1818.—Abstract.

4210. Winch, Robert F., & More, Douglas, M. Does TAT add information to interviews? Statistical analysis of the increment. *J. clin. Psychol.*, 1956, 12, 316-321.—A series of increasingly higher order coefficients of determination were compared by the F test to see if TAT inferences re needs added to the inferences developed from interview and case history material. The interview material was analyzed both by direct content and projectively; the case history was analyzed projectively. Each S was rated independently on each of the 4 measures of each of the needs studied. The criterion measure was the need rating assigned by a group on the basis of all of the material. S s were 25 married couples at least one of whom was a college student. Under these conditions the TAT did not add materially to the information gained from the interview and case history.—L. B. Heathers.

4211. Wirt, Robert D. Pattern analysis of the Rorschach. *J. clin. Psychol.*, 1956, 12, 382-384.—"Pattern analysis of Rorschach cards [number of R] and determinants show differences in the determinant patterns but no differences in card patterns for groups of normal, neurotic, and psychotic persons . . . however the configurations of determinant patterns are not, in some instances, what would be predicted." For example, normals gave the greatest number of vista responses. S s were 32 normal males, 32 hospitalized neurotics, and 32 hospitalized schizophrenics kept as comparable as possible for age, education, and occupation. The pattern analysis procedure of Block, Levine, and McNemar was used.—L. B. Heathers.

4212. Wise, Fred. Effect of chronic and stress-induced anxiety on Rorschach determinants. *Dissertation Abstr.*, 1957, 17, 1603.—Abstract.

(See also Abstracts 3509, 3510, 3511, 3512, 4254, 4312, 4320, 4344, 4392, 4455, 4653)

TREATMENT METHODS

4213. Ambrose, George, & Newbold, George. Hypnosis in health and sickness. London: Staples Press; New York: John de Graff, 1957. 196 p. \$3.50.—Freud abandoned hypnosis because he was not a good technician and used hypnosis wrongly. At the time of the second world war, J. A. Hadfield and William Brown revived hypnosis as a method of analysis which reduces psychic treatment from years to months. In this book chapters on theoretical issues (the unconscious mind, nature of hypnotism, stress theory in psychosomatic medicine, etc.) are followed by discussions of uses of hypnosis for a variety of conditions such as alcoholism and homosexuality, as well as more general sections of the value of hypnosis for various professions and in general medical practice. There are two pages of glossary and two pages of bibliography.—R. J. Corsini.

4214. Ayd, Frank J., Jr. A clinical evaluation of Frenquel. *J. nerv. ment. Dis.*, 1956, 124, 507-509.—Frenquel was administered to 44 men and 56 women between the ages of 14 and 84 with a wide variety of clinical diagnoses. While neurotic patients were unaffected, differential beneficial effects were ob-

served in the case of the psychotic patients. These are discussed.—N. H. Pronko.

4215. Baker, Elliot. The differential effects of two psychotherapeutic approaches on client perceptions. *Dissertation Abstr.*, 1957, 17, 1805-1806.—Abstract.

4216. Beley, A. Essai de contribution à la lutte contre l'empirisme thérapeutique en psychiatrie. (A contribution to the struggle against therapeutic empiricism in psychiatry.) *Évolut. psychiat.*, 1956, 2, 475-488.—A 4-year study involving fever therapy yielded promising results with 43 patients for whom other methods had proved fruitless. Apparently, favorable results ensue because of direct action upon the vegetative centers of the diencephalon, brain stem, and cortex. At this level, there occurs a regulation of functional processes of inhibition which counters against the stagnation of excitatory regions and opposes pathogenic facilitation. Furthermore, it is emphasized that the induction of fever lends itself to rigorous experimental control, provokes no harmful side effects, and represents a more natural approach.—L. A. Ostlund.

4217. Bockhoven, J. Sanbourne. Moral treatment in American psychiatry. *J. nerv. ment. Dis.*, 1956, 124, 292-321.—The modern and the moral treatment of mental illness are compared and contrasted by consideration of the following aspects of the total problem; hospital statistics and prognosis of mental illness, moral treatment defined, a culture's "way of life" and mental illness, the development of scientific psychiatry in America, and the problem of treatment in the traditional mental hospital. (See 31: 6160.) 45 references.—N. H. Pronko.

4218. Brandt, Henry A. Trends in the treatment of neuropsychiatric patients with tranquilizing drugs. *J. Ass. phys. ment. Rehab.*, 1957, 11, 58-62.—A review of the origins, chemistry, sites of action, and uses of all tranquilizing drugs is given. It is concluded that "perhaps in our enthusiasm to swing with the pendulum we have danger of again imitating the ancient 'magical beliefs' offering a panacea for all the ills of the world. At best, these drugs are only additives to established medical treatment."—L. A. Pennington.

4219. Coons, W. H. Interaction and insight in group psychotherapy. *Canad. J. Psychol.*, 1957, 11, 1-8.—66 patients, mainly schizophrenics, were randomly divided into three groups: the "interaction" Ss met regularly in subgroups of 7 each and had open discussions with little or no reference to psychotherapy; the "insight" Ss met an equal number of times for directed ("benignly authoritarian") discussions of psychological disturbances; and a control group was selected but did not meet as a group. As indicated by before-and-after Rorschach and Wechsler tests, more Ss in the "interaction group" showed improvement than in the other groups. Interaction rather than insight seems to be the essential condition for therapeutic change. 17 references.—R. Davidson.

4220. Deniker, Pierre. Psychophysiologic aspects of the new chemotherapeutic drugs in psychiatry: Some practical features of "neuroleptics" in order to screen new drugs. *J. nerv. ment. Dis.*, 1956, 124, 371-376.—A definition of the major effects of neuroleptic drugs used in psychotherapy is offered in terms of 5 criteria that may be useful in compara-

tive studies in research work on future drugs. 34 references.—N. H. Pronko.

4221. Dickmeiss, P. Largactil therapy in a nursing home for nervous diseases. *Acta psychiat. Kbh.*, 1957, 32, 6-16.—96 patients representing 9 different neuropsychiatric diagnoses were treated with chlorpromazine, perorally with dosages ranging from 75 to 700 mgm per day, for a length of 1 to 2 months. Approximately 32 had a "favourable effect," 28 improved, 36 showed "no response." Side effects and experiences are described in the light of 13 references.—R. Kaelbling.

4222. Dobrzanskaia, A. K. Dinamika vostanovleniia narushenil' vzaimodeistviia pervoi i vtoroi signal'nykh sistem pri reaktivnykh sostoianiakh. (Dynamics of the restoration of disturbances in the interaction of the first and second signal systems in reactive states.) *Zh. vyssh. nervn. Deiatel.*, 1956, 6, 663-671.—The neurodynamics of the reactive state were studied by means of "motor reactions with verbal reinforcement" before initiation of treatment, during treatment, and after termination of the pathological state, thus enabling the study of the "dynamics of restoration of disturbed nervous processes and of the interaction between the [two] signal systems in reactive states." In the development of reactive states, a summation of two kinds of passive inhibition is observed: transmarginal inhibition and negative induction. During development of the reactive condition and of its climax, "negative induction spreads from the pathodynamic structure." The change in cortical activity observed results in the "disturbance of cortico-subcortical relations" and is "reflected in the autonomic metabolic processes." Treatment by prolonged sleep, as well as by electric sleep, in combination with psychotherapy, was administered. In a number of cases with clinical improvement not yet visible, the restoration of "normal processes of higher nervous activity" could be experimentally established.—I. D. London.

4223. Donahue, Hayden H., & Fowler, Phoebe A. Some problems of feeding mental patients. *Amer. J. clin. Nutr.*, 1957, 5, 180-183.—The comprehensive treatment program of mental patients, as developed in Oklahoma, includes improved food services. Details concerning the amounts of foods used are presented. Better practices in purchasing, meal planning and preparation increased food acceptance. The role of food in the patient's life is not limited to his physical health. It can and should be one of the important forces in the treatment and resocialization of the mental patient.—J. Brožek.

4224. Durkin, Helen. Toward a common basis for group dynamics: Group and therapeutic processes in group psychotherapy. *Int. J. group Psychother.*, 1957, 7, 115-130.—Hypothesizes that "all types of groups are comparable because they have a common dynamic basis in the psychology of ego interaction . . . that findings derived from studies of other types of groups may be applied to therapy groups only if due account is taken of the differences in their situation . . . and that group and therapeutic processes are on the whole mutually reinforcing but at times tend to work in opposite directions."—D. D. Raylesberg.

4225. Fantus, Robert A., Palmer, Howard F., & Cole, Elizabeth Y. A flexible approach to group

therapy. *J. nerv. ment. Dis.*, 1956, 124, 594-603.—Group therapy added to a pre-existing ward program on an active 36-bed ward in a general hospital was found to materially extend the scope of treatment.—N. H. Pronko.

4226. Feldman, Paul E. Clinical evaluation of chlorpromazine therapy for mental illnesses: Analysis of one year's experience. *J. clin. exp. Psychopath.*, 1957, 18, 1-26.—Chlorpromazine has been found superior to older forms of therapy in treating chronically psychotic patients and for acute psychomotor excitations. French and Spanish summaries. 18-item bibliography.—S. Kavruck.

4227. Fink, Harold Kenneth, & Fink, Georgia Elisabeth. When trouble runs deep. *J. Pastoral Care*, 1957, 11, 91-97.—"The role of religious faith in the treatment of emotional illness depends . . . on the previous experience of the patient, on the religious beliefs of the therapist, and on the attitudes of religious leaders."—O. Strunk, Jr.

4228. Fleming, T. Corwin. An inquiry into the mechanism of action of electric shock treatments. *J. nerv. ment. Dis.*, 1956, 124, 440-450.—The following 6 classes of theories of action of electric shock treatment are considered: mechanical or structural, endocrine, nutritional, autonomic, changes in permeability, and miscellaneous. The question of the mechanism of action of EST resolves itself into 2 phases: (1) How is a convulsion produced? and (2) How does a convulsion cure depression? These are discussed critically. 113 references.—N. H. Pronko.

4229. Forrer, Gordon R. Symposium on atropine toxicity therapy: History and future research. *J. nerv. ment. Dis.*, 1956, 124, 256-259.—A sketch is presented of the history and future possibilities as well as the results of some studies carried out with the recently developed technique of somatic therapy known as atropine toxicity therapy.—N. H. Pronko.

4230. Goldner, Richard D. Symposium on atropine toxicity therapy: Experience of use in private practice. *J. nerv. ment. Dis.*, 1956, 124, 276-280.—Experiences in the use of atropine toxicity therapy with private office patients are summarized.—N. H. Pronko.

4231. Good, Patricia Eileen King-Ellison. A psychological study of the effects of regressive electroshock therapy. *Dissertation Abstr.*, 1957, 17, 2064-2065.—Abstract.

4232. Grisell, James L., & Bynum, Harold J. Symposium on atropine toxicity therapy: A study of the relationship between anxiety level, ego strength and response to atropine toxicity therapy. *J. nerv. ment. Dis.*, 1956, 124, 265-268.—A study was designed to test Forrer's observed relationship between anxiety and ego strength and favorable prognosis in patients receiving atropine therapy. The results are considered as supporting Forrer's hypothesis but only as a pilot study which should be followed up with a more rigorously controlled study.—N. H. Pronko.

4233. Haddock, N. N., & Mensh, I. N. Psychotherapeutic expectations in various clinic settings. *Psychol. Rep.*, 1957, 3, 109-112.—Despite the heterogeneity of patients, therapists, and clinic settings among the three samples of more than 1,000 clinic

outpatients who were studied, there remained the constant finding that about two-thirds were in treatment for fewer than five hours. This finding suggests a re-examination of therapeutic goals and expectations in outpatient settings such as these.—C. H. Ammons.

4234. Imber, Stanley D., Frank, Jerome D., Gliedman, Lester H., Nash, Earl H., & Stone, Anthony R. Suggestibility, social class and the acceptance of psychotherapy. *J. clin. Psychol.*, 1956, 12, 341-344.—A sway test was given 57 psychiatric outpatients after their initial psychiatric interview but prior to the beginning of treatment. There was no relationship between presence or absence of swaying and socioeconomic class. Swayers were more likely to remain than to terminate treatment after 0-3 interviews. Lack of sway did not predict remaining or leaving. Middle class swayers were most likely, lower class non-swayers least likely to remain in treatment.—L. B. Heathers.

4235. Iscoe, Ira; Mims, Jean, & White, Paul. An exploration in the use of personal adjustment motion pictures as a psychotherapeutic medium. *J. clin. Psychol.*, 1956, 12, 358-361.—The authors report the reactions to films on adjustment problems of 9 adolescent boys who had been placed in a private school for maladjusted children.—L. B. Heathers.

4236. Jensen, Erna Stein. Serpasil treatment in a hospital for the mentally deficient. *Acta psychiat., Kbh.*, 1957, 32, 17-19.—For up to 19 months a group comprising 12 debiles, 36 imbeciles, and 49 idiots, among them 21 men, 48 women, and 28 children was treated with Serpasil perorally. "Particularly good effects" were obtained in 10 patients, "good effects" in 31, poor, doubtful or transient effects in 24, no effect in 23, "deterioration" in 8.—R. Kaelbling.

4237. Joel, Walther. A glimpse at the group psychotherapy literature. *Int. J. group Psychother.*, 1957, 7, 191-195.—A review of articles in *Psychological Abstracts* for 1953, 1954, 1955, reveals a remarkable growth in the number and the scope of articles relating to group psychotherapy.—D. D. Raylesberg.

4238. Karliner, William, & Emma, Angelo J. Use of succinylcholine chloride (anectine) in electroshock therapy. *J. nerv. ment. Dis.*, 1956, 124, 496-499.—Anectine was used to produce muscular relaxation in 181 patients who received 1,561 electroshock treatments. Its advantages are discussed and its use recommended in connection with electroshock therapy.—N. H. Pronko.

4239. Katzenelbogen, Solomon. Analyzing psychotherapy. New York: Philosophical Library, 1958. 126 p. \$3.00.—A popular presentation of the basic components entering into the psychotherapeutic process. The author's views are based mainly on his own clinical experience and the teachings of Adolf Meyer.—L. Goldberger.

4240. Kimber, J. A. M. Progress in group psychotherapy as shown by decision making. *Psychol. Rep.*, 1957, 3, 457-458.—26 adults, 12 men and 14 women, participated in group psychotherapy for 20 or more sessions. More than two-thirds are known to have made one or more important decisions. It is believed that the group therapy was a substantial contributing factor.—C. H. Ammons.

4241. Liberman, David. **Identificación proyectiva y conflicto matrimonial.** (Projective identification and matrimonial conflict.) *Rev. Psicoanal., B. Aires*, 1956, 13, 1-20.—Patients with conflicts in their marital life are prone to reproduce the same problems throughout the transference situation. They use the analysis, the same as their marriage, as a medium to put into action their own self-destructive impulses. This particular kind of transference is called "transference psychosis" or "transference perversion." When the projective identification is not interpreted during the analytical session the patient reintroduces the part of his self that was transferred to the therapist and acts out his conflicts when outside the therapeutic configuration. English, French and German summaries.—M. Knobel.

4242. Meerloo, Joost A. M. **Emergency psychotherapy and mental first aid.** *J. nerv. ment. Dis.*, 1956, 124, 535-545.—A number of methods are explored and recommended as emergency psychotherapeutic techniques in times of mass catastrophe and for acute psychologic situations in and outside of the clinic.—N. H. Pronko.

4243. Miller, Jacob J. **Symposium on atropine toxicity therapy: Pharmacology, procedure and techniques in atropine toxicity treatment of mental illness.** *J. nerv. ment. Dis.*, 1956, 124, 260-264.—The pharmacology, procedure and techniques in atropine toxicity treatment of mental illness are described.—N. H. Pronko.

4244. Miller, Jacob J. **Symposium on atropine toxicity therapy: Repression and atropine toxicity therapy.** *J. nerv. ment. Dis.*, 1956, 124, 269-275.—A theoretical interpretation is given of the manner in which atropine therapy works, the essentials of which involve an alteration of the ego state that permits emotional discharge to take place. An illustrative case history is presented.—N. H. Pronko.

4245. Munzer, Jean, & Greenwald, Harold. **Interaction process analysis of a therapy group.** *Int. J. group Psychother.*, 1957, 7, 175-190.—A modification of Bales' categories for interaction analysis was used to study processes within a therapy group. The group had been in existence for 6 months and had met 26 times at the time of the study. A number of interesting relationships between the personal dynamics of the group members, as interpreted by the therapist, and their responses as characterized by the observer in 3 sessions were obtained.—D. D. Raylesberg.

4246. Parker, Seymour. **Role theory and the treatment of anti-social acting-out disorders.** *Brit. J. Delinq.*, 1957, 7, 285-300.—"This paper . . . describes and analyses some of the processes involved in the treatment of the 'acting-out' disorders among people with anti-social histories. The data were gathered during a 9-month period of observation" at the Social Rehabilitation Unit, Belmont Hospital, Sutton, Surrey, England. The therapeutic aims are stated and their implementation discussed and documented. 22 references.—L. A. Pennington.

4247. Perestrello, Marialzira. **A finalidade didática como dificuldade no tratamento analítico.** (Didactic motivation as a difficulty in analytic treatment.) *J. brasil. Psiquiat.*, 1956, 3, No. 3, 253-261.—The literature on the beginnings of didactic analysis as part of the training of the psychoanalyst is re-

viewed. Stress is placed on the difficulties involved in the motivation being educational rather than those of the ordinary patient. A second analysis for the analyst already accepted as a member of the psychoanalytic community is considered a possible way of overcoming this difficulty.—G. S. Wieder.

4248. Rivesman, Leonore. **Casework treatment of severely disturbed marriage partners.** *Soc. Casework*, 1957, 38, 238-245.—Describes several cases to illustrate the variety of severe personality disturbances the caseworker is called upon to treat concurrent with the help the psychiatrist offers. Among these are: (1) helping the marriage partner of a mentally ill person so that he will not sabotage the psychiatric treatment of his partner, (2) helping to differentiate between those who need psychiatric help and those who can use counseling, (3) helping the husband or wife make arrangements for the appropriate care of the spouse who must be hospitalized, (4) evaluating the client's purpose in coming to the agency.—L. B. Costin.

4249. Rosenthal, Leslie, & Garfinkel, Alexander. **The group psychotherapy literature, 1956.** *Int. J. group Psychother.*, 1957, 7, 196-211.—The 1956 literature in the group psychotherapy field is reviewed under the headings of theory, non-psychotic adults, psychotic adults, children. The review includes seventy-six references to American publications and ten foreign ones.—D. D. Raylesberg.

4250. Roth, Martin; Kay, D. W. K., Shaw, John, & Green, Joy. **Prognosis and pentothal induced electroencephalographic changes in electroconvulsive treatment.** *EEG clin. Neurophysiol.*, 1957, 9, 225-237.—A technique for evaluating the changes produced in the brain by ECT is described. "It is based on measurements of the run of delta activity that appears following a standard injection of sodium thiopentone within 3-4 hours after a convulsion. This delta activity has a finite duration which never exceeds 300 sec. and the measurement consists of plotting the changing value during courses of ECT of the percentage of time occupied by delta waves during the 300 sec. following their appearance." Evidence is presented indicating that this measure is of prognostic significance.—R. J. Ellingson.

4251. Rubinstein, Eli A., & Lorr, Maurice. **A comparison of terminators and remainders in outpatient psychotherapy.** *J. clin. Psychol.*, 1956, 12, 345-349.—Scores from 2 personality inventories, a real-ideal self discrepancy measure, and a vocabulary test and data on education and occupation were analyzed for 60 Ss who had remained in treatment at least 6 months and for 68 Ss who terminated treatment after 5 or less interviews. Ss were patients from 9 VA mental hygiene clinics throughout the country. Each of these groups was divided to provide an original and a validation sample. Item analyses were done independently for the first 3 measures for the 2 samples, the items selected on one sample being checked on the other sample. Vocabulary, occupation, and education were combined into one score (VEO). The final items were those found useful on both samples. When used on the total group the personality measures discriminated about 65% of the remainders from the non-remainders, about the same percentage as the VEO score alone. Remainders tended to be sicker as judged by dis-

ability rating, more self-dissatisfied, brighter, better educated, less impulsive, and less rigid than terminators.—L. B. Heathers.

4252. Schubert, Rolf. Erfahrungen mit dem neuen Kurzmarkotikum Brevinarcon in der Psychiatrie unter besonderer Berücksichtigung der Konvulsionsbehandlung. (Experiences with the new short-acting anesthetic Brevinarcon in psychiatry with special consideration of convulsive therapy.) *Psychiat. Neurol. med. Psychol., Leipzig*, 1957, 9, 83-85.—The anxiety due to the paralysis of curarization prior to electro-convulsive therapy is avoided by the administration of Brevinarcon. It was found effective, safe, and free of postanesthetic side-effects in 300 treatments. It produces mild euphoria. Russian summary.—C. T. Bever.

4253. Schwarz, Heinz. Symposium on atropine toxicity therapy: Statistical evaluation. *J. nerv. ment. Dis.*, 1956, 124, 281-286.—"This paper reports the effect of tropine toxicity therapy on the mental status of selected patients treated at the Northville State Hospital during the years 1954 and 1955. Tranquilizing drugs were in some instances used concurrently or subsequently to atropine toxicity therapy, and the relative effectiveness of atropine toxicity alone, compared with its combination with one of the tranquilizing agents, is also reported upon."—N. H. Pronko.

4254. Silver, Irving Herman. Attitudes toward the self and others of a group of psychoanalysts. A determination of the relationship between attitudes toward self and toward others and human and human-like responses on the Rorschach. *Dissertation Abstr.*, 1957, 17, 1815-1816.—Abstract.

4255. Simon, Werner, & Edwards, Robert V. Glycyrrhiza (licorice) in the treatment of psychiatric illness. *J. clin. exp. Psychopath.*, 1957, 18, 79-86.—7 patients treated with licorice responded favorably from symptoms of weakness, listlessness, lethargy, and lack of energy and stamina. French and Spanish summaries. 18-item bibliography.—S. Kavruck.

4256. Slavson, S. R. Are there "group dynamics" in therapy groups? *Int. J. group Psychother.*, 1957, 7, 131-154.—"The therapeutic aim in its very nature is antagonistic to group formation and group dynamics." Group dynamics arises in groups in which there is a goal common to all members and which act by consent of the majority. Examples of such groups are educational, social, and action groups. No common aim is evident in therapy groups in the same sense. Often group cohesion has to be prevented so that each can communicate his problems and work them through. The interpersonal interactions which arise in therapy groups and which are part of the process of therapy should not be confused with what are generally considered 'group dynamics.'—D. D. Raylesberg.

4257. Snyder, William U. Psychotherapy. *Annu. Rev. Psychol.*, 1958, 9, 353-374.—"For the purposes of this review, the significant material has been culled to about one-third its original size. . . ." The survey is reported under the headings of: Theoretical contributions, Reports on research, Applications and techniques, and Summary. 90-item bibliography.—A. J. Sprow.

4258. Spiegel, E. A., Wycis, H. T., Freed, H., & Orchinik, C. W. A follow-up study of patients treated by thalamotomy and by combined frontal and thalamic lesions. *J. nerv. ment. Dis.*, 1956, 124, 399-404.—A series of 77 cases of thalamotomy were followed up from one to 8 years after operation and showed best results in severe anxiety neurosis and depression states. Its role in treatment is discussed.—N. H. Pronko.

4259. Tausch, Reinhard. Nicht-directive Erwachsenen-Psychotherapie bei deutschen Klienten. (Non-directive therapy with German adult clients.) *Z. exp. angewand. Psychol.*, 1956, 4, 193-244.—The first of a series of articles to acquaint German psychologists with Roger's method of non-directive therapy gives an outline of the method and demonstrates the procedure with the case studies of 4 German adult clients. English and French summaries. 83 references.—W. J. Kopitz.

4260. Ulett, George A., & Johnson, Margaret W. Effect of atropine and scopolamine upon electroencephalographic changes induced by electroconvulsive therapy. *EEG clin. Neurophysiol.*, 1957, 9, 217-224.—Atropine and scopolamine blocked the occurrence of slow waves in the EEG usually seen following ECT. When the drug was continued for a week or more following termination of ECT, marked slowing did not occur. If the drug was discontinued within 1-2 days after therapy, slow high-voltage waves would appear suddenly.—R. J. Ellingson.

4261. Van Bark, Bella S., Kilpatrick, Elizabeth; Wolberg, Lewis R., Eckardt, Marianne Horney; Weiss, Frederick A., Farber, Leslie H., DeRosier, Louis E., & Arieti, Silvano. What is effective in the therapeutic process? A round table discussion. *Amer. J. Psychoanal.*, 1957, 17, 3-33.—The effectiveness of therapy depends upon the increasing ability of the patient to utilize his constructiveness, the skill of the therapist, and the establishment and maintenance of a unique, sensitive relatedness between patient and therapist (Kilpatrick). Improvement or cure is to a large extent due to a restoration of the patient's sense of mastery (Wolberg). Human warmth and the capacity for empathy in the therapist are important in the therapeutic process (Eckardt and Weiss). Therapy is effective in an atmosphere of mutual trust or basic trust (DeRosier and Arieti). 40 references.—D. Prager.

4262. Wassell, Ben Bohdan. The analytic relationship: Unresolved transference. *Amer. J. Psychoanal.*, 1957, 17, 45-57.—To promote the working through of transference, the analyst should take stock regularly of all aspects of the work including his own feelings, refrain from overdoing work on transference, avoid premature transference interpretations, recognize that the patient's feelings do influence the doctor-patient relationship, feel free to recommend another analyst, use group analysis as an aid in some cases, and work constantly at becoming a better human being and a more intuitive technician.—D. Prager.

4263. Wendt, H. Schlaftherapie und zweites Signalsystem. (Sleep therapy and "second signal" system.) *Z. Psycho-som. Med.*, 1956, 2, 215-219.—Words, "Pavlov's signal of signals," are used to induce therapeutic sleep in patients. In a preparatory stage, after deep explorations, and neurological and

physiological examinations, the patient is familiarized with autogenic training and hypnosis, the illness is explained as a reversible functional disorder, and the necessity of cooperation of the patient is emphasized. After 3-10 days, is exposed—3 times daily, about 40 min. long to suggestions of rest and relaxation by a tape recorder in a dark room. A graph showing the curves of temperature, pulse, periods of sleep is added.—*E. Katz.*

4264. Yamada, Toshiji, & Takumi, Akira. **Histamine effect upon the symptoms of LSD intoxication.** *Folia psychiat. neur. jap.*, 1956, 10, 163-172.—8 male psychiatrists served as subjects. When, after oral administration of LSD subjects had developed typical LSD symptoms, histamine was given intravenously. LSD symptoms subsided in much the same fashion as they do upon succinate or nicotinic acid administration. The procedure is described with dosages, time relationships and details of LSD symptoms and their inhibition.—*M. L. Simmel.*

(See also Abstracts 3481, 3789, 3880, 4112, 4153, 4311, 4316, 4346, 4347, 4362, 4363, 4376, 4379, 4380, 4386, 4388, 4393, 4394, 4396, 4397, 4407, 4408, 4411, 4425, 4428, 4442)

CHILD GUIDANCE

4265. Barbour, R. F. **Child guidance clinics and the prevention of juvenile delinquency.** *Brit. J. Delinq.*, 1957, 7, 271-284.—This general review of the work accomplished by child guidance centers in England places major stress upon the "multidimensional view" and the team approach to the identification, disposition, treatment, and re-education of the youthful offender. 17 references.—*L. A. Pennington.*

4266. Kirby, Joyce. **The intake period in the child placement process.** *Jewish communal Serv.*, 1957, 33, 271-276.—The placement of children is frequently the source of guilt feeling and associated anxiety for both parents and placement worker. The description of some of the problems met during the intake period in one placement agency are described. The intake period is delineated as terminating "when the parent and child are ready for the placement experience, and when the agency believes that it can offer its services." The painfulness of contemplation of parting, the fear of what the new environment offers in the way of threat, and many other factors must be met and overcome by skilled casework during and after the intake period.—*M. A. Seidenfeld.*

4267. Michal-Smith, H. (Ed.) **Management of the Handicapped Child: Diagnosis, treatment and rehabilitation.** New York: Grune & Stratton, 1957. x, 276 p. \$6.50.—Chapters and their contributors are: The child with severe behavior disorders (Frederick H. Allen and Meyer Sonis); the child with "nervous" habits (Harold Michal-Smith); the child who is mentally gifted (Gertrude Hildreth); the socially and emotionally deprived child in institutional care (Wilfred C. Hulse and Lawrence B. Slobody); the child with special and language disorders (H. Harland Bloomer); the child with impaired hearing (William G. Hardy and John E. Bordley); the visually handicapped child (Franklin M. Foote and Helen Gibbons); the child with cleft lip and palate (Edward F. Lis); the child with disorders of physical growth (John L. Hampson and John

Money); the child with neuromuscular disease (Jerome S. Tobis); cystic fibrosis and celiac disease in childhood malnutrition (Henry Shwachman); the child with nephrosis (Henry L. Barnett); and community aspects and care for the handicapped child (Helen M. Wallace).—*T. E. Newland.*

4268. Phillips, E. Lakin. **Cultural vs. introphic factors in childhood behavior problem referrals.** *J. clin. Psychol.*, 1956, 12, 400-401.—"From child guidance records, 635 cases were examined as to sex and ordinal position. Reliably greater numbers of first-born occurred in the clinic population than in the general population. Whether male or female, the chances of being a first-born who is referred for psychological help is found to be great. Results were interpreted in terms of parent-education explanations. . . ."—*L. B. Heathers.*

4269. Studt, Elliot. **Care of children in detention.** *Dissertation Abstr.*, 1957, 17, 2083.—Abstract.

(See also Abstract 4196)

VOCATIONAL GUIDANCE

4270. Adcock, C. J., & Brown, L. B. **Social class and the ranking of occupations.** *Brit. J. Sociol.*, 1957, 8, 26-32.—This study suggests that there is no widely accepted reference frame for the social grading of occupations. It seems that most individuals fix their own frame of reference when ranking occupations. And since differently specifying or describing an occupation alters its rank, it is questioned whether or not occupation, if not rigorously defined, is a meaningful approach to the study of social class.—*R. M. Frumkin.*

4271. Boss, Jean-Paul. **Recherche sur la validation de la batterie d'orientation professionnelle GATB.** (Research on the validation of the vocational aptitude test battery GATB.) *Schweiz. Z. Psychol. Anwend.*, 1957, 16, 253-261.—The General Aptitudes Test Battery (GATB), devised by B. J. Devorak of the U. S. Department of Labor, purports to measure ten aptitudes, which are considered important for vocational guidance. In order to test the applicability of the GATB to Swiss situations, 1,000 boys aged 15 in the canton of Neuchâtel were examined. Preliminary results indicate differences among regions and among types of schools. It will take three years to complete the validation of the battery. English and German summaries.—*J. W. House.*

4272. Crites, John Orr. **Ability and adjustment as determinants of vocational interest patterning in late adolescence.** *Dissertation Abstr.*, 1957, 17, 1593-1594.—Abstract.

4273. Duval, R. **La situation de la psychologie appliquée à l'orientation professionnelle au Canada.** (The situation of psychology as applied to vocational guidance in Canada.) *Bull. Orient. scol. profess.*, 1957, 6, 23-29.—In Canada, work in the various branches of psychology has grown extensively, but for a long time there were very few specialists in vocational guidance. The government does not assume any direct responsibility for guidance, this being left to private initiative, universities, schools, social agencies, etc. There is need for studies leading to more definite standardization of methods and techniques, and to professional certification.—*R. Piret.*

4274. James, Warren Edward. Differential acceptance of occupations as professions. *Dissertation Abstr.*, 1957, 17, 1620-1621.—Abstract.

4275. Jaur, J.-M. L'évolution de l'orientation professionnelle en France. (The evolution of vocational guidance in France.) *Bull. Orient. scol. profess.*, 1957, 6, 3-13.—In France, vocational guidance was at first looked on as part of the process of placing young people in business and industry. Since 1938 it is obligatory and considered to be a service rendered to young people. This humane view is based on a personalistic theory of choice of profession.—R. Piret.

4276. Krishnan, B. Social prestige of occupations. *J. voc. educ. Guid.*, 1956, 3, 18-22.—Replication of 2 USA studies on the prestige of occupations where 255 students at the University of Mysore, India, ranked 25 occupations. Results are presented comparing USA findings with rankings for the 4 major caste groups in India. Correlations for these 4 groups with USA rankings were in the 80s; higher intercorrelations were found for the 4 Indian castes, demonstrating much inter-caste agreement. A factor analysis showed the Indian results could be explained on the basis of social prestige of the occupations.—W. L. Barnette, Jr.

4277. Mehta, Hoshang P. Need for theoretical research in vocational guidance. *Educ. & Psychol.*, Delhi, 1956, 3(4), 64-66.—Undue emphasis on tests in vocational guidance has meant the neglect of theory and objectives. The matter of job satisfaction has been neglected. Theory construction lags far behind the development of "tools." Author's main purpose is to alert professionals to the need for "fundamental" research in vocational guidance.—H. Angelino.

4278. Mehta, H. P., & Mehta, P. H. Changing concepts in vocational guidance. *J. voc. educ. Guid.*, 1956, 3, 23-32.—An account of changes in theory and practice of vocational guidance in USA and an examination of these implications for India. The Indian scene is characterized as highly test-centered with the result that unscientific stereotypes about vocational guidance are given to the public. The need for individual counseling is not appreciated. Research in counseling under Indian conditions is greatly needed; the place to begin is a study of the economic, social, and educational conditions of India.—W. L. Barnette, Jr.

4279. Menninger, Karl. Psychological factors in the choice of medicine as a profession: Part I. *Bull. Menninger Clin.*, 1957, 21, 51-58.—Some fortunate individuals may actually be free to choose a preferred vocation. Few studies have investigated the problem of how vocational choices are made, but choice is obviously closely related to motivation. Autobiographical material has presented the familiar conscious motives determining the choice of medicine as a profession. Psychoanalysis of physicians (for both training and therapeutic purposes) has built up an unsystematized body of information as to the unconscious motives determining their vocational choice. Suggestions are made regarding the general choice of medicine.—W. A. Varvel.

4280. Sinha, D. Problems of vocational guidance in India. *J. voc. educ. Guid.*, 1956, 3, 8-17.—Lack of validation studied with mental ability tests

as well as the unavailability of any all-India non-verbal type of test makes for reliance on local norms and evidence from other countries. Few vocational aptitude tests of worth are available; the wide use of western tests in India is criticized. A similar situation exists with interest and personality tests. Adequate cumulative records for individual students are needed. On the job level, the situation in India is made worse because of the prevailing unemployment. The task of the vocational counselor in India should be that of a "helper in self-guidance" which can best be achieved by provision of adequate occupational information.—W. L. Barnette, Jr.

4281. Smith, Robin Nelson. The evaluation of a less structured form of interest test item. *Dissertation Abstr.*, 1957, 17, 1709-1710.—Abstract.

4282. Stephenson, Richard M. Realism of vocational choice: A critique and an example. *Personn. Guid. J.*, 1957, 35, 482-488.—In a questionnaire study of 1,000 ninth grade students, data were collected on occupational information, educational plans, and father's occupation. Examination of the data suggests that occupational aspiration may not be realistic, but that occupational planning is clearly more realistic than is often assumed. Sex and economic class differences are discussed.—G. S. Speer.

4283. Straus, Murray A. Personal characteristics and functional needs in the choice of farming as an occupation. *Rur. Sociol.*, 1956, 21, 257-266.—48 of 148 farmers' sons who were high school seniors in the state of Washington and who gave farming as their preferred occupation were not significantly different in intelligence, physical ability or proximity to urban centers from those choosing other occupations. Those choosing farming tended to come from farms with higher income, to spend considerably more time working on the farm, and to be influenced more by direct contacts with farm life as compared with reading or contacts with outside persons.—H. K. Moore.

4284. Super, Donald E. Vocational adjustment in terms of role theory. *Voc. Guid. Quart.*, Summer, 1957, 5, 139-141.—"Work having a central role in human life, it is not surprising that vocational development is easily viewed as the implementation of a self concept." The individual aspires to a certain role and consequently "role playing is a means of self-realization, just as it is a means of self-exploration. The role expectations of the job . . . may not be the same as the role aspirations of the individual. In such a case, the individual must adapt himself to the requirements of the situation, adapt the situational requirements to his needs, or leave the scene." Later author states: "Those who are expected to play conflicting roles tend to be anxious and ineffective. . . ." Role expectations, role shaping, role playing and role conflict are also discussed.—F. A. Whitehouse.

4285. Viglietti, M. La situation actuelle de l'orientation professionnelle en Italie. (The present state of vocational guidance in Italy.) *Bull. Orient. scol. profess.*, 1957, 6, 14-22.—Since the first national congress of vocational guidance in Italy in 1948, activities modeled on those of foreign countries have multiplied, and public interest in guidance is great. We may hope for more guidance counsellors in Italy, and legal recognition of the title.—R. Piret.

(See also Abstracts 3577, 4486, 4561, 4567)

BEHAVIOR DEVIATIONS

4286. Blaine, Graham B., Jr. Religion and psychiatry: Some philosophical observations. *J. Pastoral Care*, 1957, 11, 84-90.—Better understanding is needed between the fields of psychiatry and religion; such understanding "can be accomplished only through cooperative thinking on the part of those engaged in the study and practice of religion, psychiatry, psychology, social science, and philosophy."—O. Strunk, Jr.

4287. Briggs, Dennie L., & Stearns, Lina. Developments in social psychiatry: Observations in five selected English hospitals. *U. S. Armed Forces med. J.*, 1957, 8, 184-194.—The institutions are described with emphasis on "(1) the types of illness treated within the hospital setting, (2) the actual process and extent of behavioral change, and (3) the specific procedures that had evolved." The therapeutic community-type hospital elevates the role of the patient by introducing a respect for his dignity. The patients themselves contribute to the treatment program by their participation in the administration of the hospital and their increased communication among themselves and staff members.—G. H. Cramp-ton.

4288. Constantinides, C. La mélancolie et la manie comme phénomène de régression. (Melancholia and mania as regression phenomena.) *Evolut. psychiat.*, 1956, 2, 461-471.—The study of anthropoids and contemporary primitives leads to the conclusion that direct contact with nature intensifies sentiments of impatience, power, and joy. These archaic biophysical states of affectivity constitute a fundamental evolutionary vestige which remains latent until triggered off by danger. However, for civilized man, sentiments produce different results. For example, anxiety is instinctive and communicates directly to the self without intellectual mediation, causing somatic reactions in the form of heart palpitations. On the contrary, sadness develops out of purely intellectual elaborations with referents that are moral and social, rather than somatic. Phylogenetically, psychic aberrations may be considered evolutionary throwbacks from primitive stages of human development. Ontogenetically, they represent infantile manifestations.—L. A. Ostlund.

4289. Eichler, Robert M., & Lirtzman, Sidney. Religious background of patients in a mental hygiene setting. *J. nerv. ment. Dis.*, 1956, 124, 514-517.—Information was gathered on the religious backgrounds of 339 patients in individual treatment at the clinic of the VA New York Regional Office. It was found that 50.7% of patients were Jewish, 29.4% Catholics and 12.6% Protestants. In the geographic area served by this clinic the religious background of the population approximates 45% Roman Catholics, 25% Jews, 25% Protestants and 5% others. An analysis of possible reasons for this distorted representation suggests the influences of a number of variables besides religion.—N. H. Pronko.

4290. Ellsworth, Robert B. Some observations on patient government: Problems and parameters. *J. clin. Psychol.*, 1956, 12, 353-357.—The author reports his observation of factors which reduce the effectiveness of patient government groups in a mental hospital.—L. B. Heathers.

4291. Fodor, Nandor. Psychopathology and problems of oral libido in the use of language. *Amer. Imago*, 1956, 13, 347-381.—"The psychopathology of everyday life is deeply involved with language. Examples of mishearing, misspeaking, misreading, miswriting . . . are encountered by all who care to observe and analyze the facts. . . . Playing with sounds is also within universal experience. The problem of oral libidinal discharge . . . covers a variety of semantic manifestations, including phonetic absurdities, double entendre and double talk, tongue twisters, riddles, anagrams and puns. . . . The present study aims . . . at a comprehensive covering of the whole field of semantic adventures as they are met in clinical experience."—W. A. Varvel.

4292. Garner, Ann M. Abnormalities of behavior. *Annu. Rev. Psychol.*, 1958, 9, 391-418.—This review surveys the literature from May 1956 to May 1957. The papers ". . . which receive emphasis here are those which attempt to relate findings to the growing body of psychological and psychiatric theory and which show sensitivity to problems of methodology." 117-item bibliography.—A. J. Sprow.

4293. Gilbert, Doris C., & Levinson, Daniel J. Ideology, personality, and institutional policy in the mental hospital. *J. abnorm. soc. Psychol.*, 1956, 53, 263-271.—Individual and collective modes of analysis of ideology in a mental hospital were made. In the individual ideology was assessed by a custodialism-humanism scale. In the collective unit an assessment was made with respect to the degree of custodialism in its policy requirements and in the modal ideology of its personnel. It was found that the individual preferred a custodialistic orientation which was part of a broader pattern of personal authoritarianism. In the collective unit there was found to be considerable congruence between policy, modal ideology, and modal personality. 15 references.—A. S. Tamkin.

4294. Gregory, B. A. J. C. The menstrual cycle and its disorders in psychiatric patients: I. Review of the literature. *J. psychosom. Res.*, 1957, 2, 61-79.—The menstrual cycle is discussed in 4 sections, namely, in "normals," in the neuroses, in the psychoses, and following shock treatment.—L. A. Pennington.

4295. Gresock, Clement J. The influence of interpersonal conflict upon visual perception. Washington, D. C.: Catholic Univ. Press, 1957. 31 p.—The Ss included schizophrenics, neurotics and normals. The following conclusions were drawn: (1) the higher the interpersonal conflict, the greater the recognition threshold for socially threatening stimuli, (2) psychiatric patients as compared with normals do not respond differently to stimuli of threatening social situations relative to non-threat stimuli, (3) results indicate a general decrement in perception of all stimuli for psychiatric patients as compared with normals. 25 references.—M. O. Wilson.

4296. Group for the Advancement of Psychiatry. Committee on Public Education. The psychiatrist in mental health education: Suggestions on collaboration with teachers. *GAP Rep.*, 1956, No. 35. 83 p.—Orientation for the psychiatrist on how he can "be most helpful when he is asked to counsel with or speak to a group of teachers." The premise of this practical guide is the need for the psychiatrist to pre-

pare himself for this role by knowing "about the interests, needs and problems of teachers in schools and what children express as problems." Respect for the teaching profession is mandatory for successful cooperation. Along with this goes "the need to use appropriate material . . . for what teachers want to hear about does not [usually] coincide with what psychiatrists want to talk about."—*J. C. Franklin.*

4297. Keidel, Keith W. Religious influences for mental health. *J. Pastoral Care*, 1957, 11, 20-24.—Psychiatry is recognizing religion as an important factor in evolving good mental health. Psychiatry has shown religious institutions the importance of the home in developing healthy persons. Several ways in which the family may teach good mental health in terms of religious attitudes are listed.—*O. Strunk, Jr.*

4298. Klebanoff, Lewis Bernard. A comparison of parental attitudes of mothers of schizophrenic, brain injured, and normal children. *Dissertation Abstr.*, 1957, 17, 2066.—Abstract.

4299. Klopfer, Walter G., Wylie, Alexander A., & Hillson, Joseph S. Attitudes toward mental hospitals. *J. clin. Psychol.*, 1956, 12, 361-365.—Soule's scale measuring attitudes towards mental hospitals was given to several small groups—employees on an intensive treatment ward, clerical and administrative hospital personnel, in-patients receiving some kind of psychotherapy, head attendants on non-intensive treatment wards, high school seniors, business men—to see if it would reflect group differences. Over half of the *t*'s computed were at least significant. Clerical and administrative personnel were least, patients most critical towards mental hospitals. Items differentiating the groups are discussed.—*L. B. Heathers.*

4300. Koltes, John A. Psychiatry in the capitals of Europe. *Psychiat. Quart. Suppl.*, 1956, 30, 283-300.—The author went to Europe recently to observe the operation of psychiatric hospitals and teaching institutions. "One cannot compare American psychiatry and European psychiatry because of the cultural, theoretical, and sociological differences which exist between the two continents. . . . One of the great lessons of Europe is that we must continue to search for new methods of treatment, that we must avoid the euphemism of "custodial care" for mental patients and that we must search for new horizons that will help us to meet successfully the enormous problems that mental illness presents to us." 27 references.—*D. Prager.*

4301. Martins, Clovis. A reserpina no tratamento psiquiátrico. (Reserpine in psychiatric treatment.) *J. brasil. Psiquiat.*, 1956, 5, 197-252.—The author describes the use of reserpine with 54 female psychotic or neurotic patients. Favorable results were obtained in 52% of the cases. In dividing the patients into 4 groups in accordance with presenting symptomatology, it was found that 82.5% of the favorable results were found in those groups presenting as primary syndromes autism, negativism, excitement and agitation. 36 references.—*G. S. Wieder.*

4302. Mayer-Gross, W. Kraepelin's Arzneimittelstudien und die pharmakologische Psychiatrie der Gegenwart. (Kraepelin's studies on drugs and present day pharmacological psychiatry.) *Nerven-*

arzt, 1957, 28, 97-100.—Already 60 years ago, Kraepelin designed experimental studies on the influence of hunger, sleep deprivation, exhaustion and drugs on healthy subjects. On the basis of individual variations thus found he hoped to find characteristic group-reactions and personality types for his design for a "measuring individual psychology." From his personal knowledge the author outlines the development of experimental psychopathology from the physiological psychology of Wundt up to behaviorism and the role of modern statistical methods.—*M. Kaelbling.*

4303. Mignot, Hubert. Reflexions sur l'exercice de la psychiatrie en milieu asilaire. (Reflections concerning psychiatric practice within institutions.) *Evolut. psychiat.*, 1956, 2, 447-460.—When one considers that society decides who shall be hospitalized, as well as the fact that patients have no option with regard to psychiatric treatment, it is clear why feelings of negativism often result. Thus, rapport is handicapped from the beginning. This hampers one of the psychiatrist's chief functions—to effect the adaptation of the patient to the community within the institution. Actually, the success of this process may be judged by the number of rebellious patients. Another hindrance is the popular misconception that the psychiatrist's role is to judge sanity and criticism reverberates when anti-social acts result in the return of a parolee. Rather, the public should be educated to accept therapy as the most important function and to agree that the sole criterion for dismissal should be the capacity to return to society, instead of complete recovery.—*L. A. Ostlund.*

4304. Raychaudhuri, Arun Kumar. Are the first born more susceptible to functional mental diseases? *J. nerv. ment. Dis.*, 1956, 124, 478-486.—Hereditary and environmental influences are examined to see if they may in any way influence selectively any particular birth order. It is concluded that heredity does not but that the physical and the socio-familial conditions during the life history of the person may well form a nucleus of his later mental abnormalities. 27 references.—*N. H. Pronko.*

4305. Rodger, T. Ferguson. The other man's point of view. *Brit. J. med. Psychol.*, 1957, 30, 3-8.—Recounting an experience of encountering a view totally irreconcilable with his own when visiting Russia, the author points to the principle that there is a fundamental value in trying to see the point of view of another and what one does to contribute to being misunderstood. There exists a problem of psychiatry having promised too much, and now being given too much responsibility and too much blame in proportion to what psychiatry can really do. The plea is for a more realistic self-appraisal and then a realistic definition of psychiatry for the public.—*C. L. Winder.*

4306. Rosenbaum, Gerald. Stimulus generalization as a function of clinical anxiety. *J. abnorm. soc. Psychol.*, 1956, 53, 281-285.—"It was hypothesized that the state inferred from manifest clinical symptoms of anxiety would show functionally similar motivational properties to the state of anxiety defined in terms of an implicit response that has been conditioned to situations involving noxious stimulation. It was predicted that both types of anxiety would exhibit the energizing properties of a drive and therefore elevate response gradients of generalization. . . .

The results showed that the groups designated as high in clinical anxiety showed significantly more generalization than the low-clinical anxiety groups under the strong-shock condition. No difference was found between the 2 levels of clinical anxiety for either the weak-shock or buzzer condition."—A. S. Tamkin.

4307. Stieglitz, Edward J. The integrated unity of the patient. *Geriatrics*, 1957, 12, 329-338.—The patient rather than his disease or diseases must be the unit of medical practice. Factors of age, health, maturity, environment, and disease are interdependent variables. Attention should be redirected from fragmentation to the integrated unity of the patient.—D. T. Herman.

4308. Stemmermann, M. G., & Owen, Thelma V. Autonomic changes in chronically ill patients. *Dis. Chest*, 1956, 30, 540-548.—Autonomic testing to determine Central Sympathetic Reactivity (Funkenstein test) was done on 12 patients in each of 5 groups: out-patient tuberculous, other chronic diseases, psychoneurotics, psychotics, and healthy controls. All controls but less than half of other groups had a "normal" test response; all mental patients had abnormal responses. Type of abnormality, nutrition, sedimentation rate, and original disease were not relevant. However, self-discharge occurred frequently in TB patients with abnormal test responses. It was suggested that this and other chronic disease groups would benefit from psychotherapy, perhaps with reserpine or chlorpromazine, and that autonomic testing might be used to predict self-discharge.—B. M. Stewart.

4309. Zuckerman, Marvin; Baer, Marc, & Monashkin, Irwin. Acceptance of self, parents and people in patients and normals. *J. clin. Psychol.*, 1956, 12, 327-332.—Acceptance of self, parents, and people-in-general was measured by the discrepancy between S's ratings of these groups and his rating of his ideal self. Ss were 60 normal persons, primarily hospital personnel, and 60 hospitalized mental patients, half of whom were schizophrenics. Patients were rated for adjustment on the basis of their case histories. For the total patient group, acceptance of people and of father correlated significantly but not highly with the adjustment ratings. In general, the differences in acceptance scores were in the expected direction with the schizophrenic patients showing least acceptance except on the self-acceptance measure; however, the schizophrenic-nonschizophrenic groups were not significantly different on any of the four acceptance measures.—L. B. Heathers.

(See also Abstract 3742)

MENTAL DEFICIENCY

4310. Chambers, Guinevere S., & Zabarenko, Ralph N. Effects of glutamic acid and social stimulation in mental deficiency. *J. abnorm. soc. Psychol.*, 1956, 53, 315-320.—50 male and 8 female residents of Polk State School for mental defectives were used as Ss. Their IQs ranged from 20 to 66 with a mean of 54, resulting from familial mental defect, abnormal developmental conditions, or post-natal brain damage. 2 distinctly different social environments were used, and L+ glutamic acid was used as the experimental drug, and a placebo for control. The findings showed that L+ glutamic acid did not produce significant improvement in mental

functioning, that increased personal attention enhanced mental functioning, and that a greater gain in functioning was made by Ss given added attention but with minimal disruption of the familiar environment. 23 references.—A. S. Tamkin.

4311. Gunzburg, Herbert C. Therapy and social training for the feeble-minded youth. *Brit. J. med. Psychol.*, 1957, 30, 42-48.—Seven years of experience with a psychologically oriented, individualized treatment program for feeble-minded male youths is described. There is emphasis on both habit training and individual needs and counseling. The results of the program are not yet clear but a preliminary assessment is grounds for optimism that rehabilitation will be substantial in a large majority of the cases.—C. L. Winder.

4312. Hand, Mary Ella. The Rorschach as a measure of personality change in children in a residential school for mentally handicapped. *Dissertation Abstr.*, 1957, 17, 1585.—Abstract.

4313. Itoga, Kazuo, & Tanaka, Masato. Seishin hakujiyaku-sha no shakai-teki tekiō. (A study on the prognoses of social adjustment of the feeble-minded.) *Jap. J. educ. Psychol.*, 1956, 3, 204-213.—Social adjustment of 903 Ss whose IQs were under 70, was surveyed by interview, reports from their families, friends in their occupation, and former school teachers. It was found that the degree of social adjustment is not determined by a single factor but many factors, such as need for adjustment, stability in environment, occupational status, acceptance by other people, are interrelated. English summary, p. 244-245.—S. Ohwaki.

4314. Leland, H. Some psychological characteristics of phenylketonuria. *Psychol. Rep.*, 1957, 3, 373-376.—Psychological characteristics of 33 phenylketonuria patients were not uniform, although the majority showed a consistent pattern. All were mentally retarded but differed as to degree and manifestation. The manifestations were related to behavior usually considered consistent with schizophrenia, and were more apparent with the less severely retarded.—C. H. Ammons.

4315. Saenger, Gerhart. The adjustment of severely retarded adults in the community: A study of former pupils of low IQ classes held by the Board of Education of the City of New York, 1929-1956. Albany: New York, State, Interdepartmental Health Resources Board, 1957. xix, 176 p.—This descriptive study examines the present status of former New York pupils with a low I.Q. between 40 to 50. They attended special classes for non-institutionalized children during the years from 1929 to 1955. Based on 520 cases separate analyses for different subgroups explored: (1) the characteristics of the severely retarded and their families; (2) the information as to the proportion of institutionalization of former pupils; (3) home-adjustment; (4) use of community resources; (5) working for pay; (6) plans made for the future of the retarded. Most of the retarded appeared alert and lively and took an interest in life.—F. Goldsmith.

4316. Wallin, J. E. W. Notable advances in the understanding and treatment of mentally handicapped children. *Augustana Coll. Occas. Pap.*, 1957, No. 1. 20 p.—Progress in the work with mentally handicapped children is discussed. Advances are de-

scribed in the following: determination of the cause of mental deficiency, the diagnosis; development of new medical procedures for treatment; increased educational opportunities for the mentally retarded; more institutions and special classes; provisions for the very young mentally retarded children; use of psychotherapy in treatment of the mentally retarded; better attitude toward employment of the mentally handicapped; more recreation centers and summer camps for them; training of special teachers and other specialists to work with this group of handicapped; development of programs to educate the public on mental deficiency; increased counseling and guidance for parents of mentally retarded children, and the organization of parents' groups. Detailed discussion is accorded the causation of mental deficiency and retardation.—V. M. Staudt.

4317. Woodward, K. F., & Siegel, M. G. **Psychiatric study of mentally retarded children of preschool age.** *Pediatrics*, 1957, 19, 119-126.—This preliminary report of a 3-year study of 8 mentally retarded children and their parents suggests the operation of psychogenic factors in these cases. 34 references.—E. L. Robinson.

4318. Wright, M. Erik, & Croley, Hugh T. (Eds.) **Research in the management of the mentally retarded child; first Winfield Institute.** Winfield, Kan.: Winfield State Training School, 1956. v, 242 p.—Papers and discussions from the institute of October 1956, including Sermour B. Sarason, Psychological and cultural factors in the etiology of mental retardation; Lauretta Bender, Medical factors in diagnosis contributing to management and treatment programs. Problems within the family are discussed by Kenneth Razak and Harriet E. Blodgett; within the community by Herman Yarnet, H. E. Blodgett, and Mildred Thompson. Treatment and education are covered in papers by Sol Nichtern, James J. Gallagher, G. Orville Johnson, and John V. Hottell. Prediction of post-institutional status is treated in papers by Maynard C. Reynolds and Donald G. MacEachern and Albert J. Shafter.—W. L. Wilkins.

(See also Abstracts 3801, 4478, 4555)

BEHAVIOR PROBLEMS

4319. Carstairs, G. M., & Grygier, T. **Anthropological, psychometric, and psychotherapeutic aspects of homosexuality.** *Bull. Brit. psychol. Soc.*, 1957, 32, 46-47.—Abstract.

4320. Cutter, Fred. **Sexual differentiation in figure drawings and overt deviation.** *J. clin. Psychol.*, 1956, 12, 369-372.—The DAP was given to 108 males committed to a mental hospital as sexual psychopaths (SPO), 59 sexual psychopaths—22 overt, 37 covert—in therapy who were on indefinite commitments, and to 22 normal psychiatric technician trainees. 2 judges rated the drawings for degree of sexual differentiation. There were no significant differences in the ratings for the 3 groups. For the SPO's there was no relationship between rating and type of sexual deviation, but the rating correlated positively (.21) with W-B Verbal IQ, negatively (–.27) with age. For the therapy group the rating correlated .52 with MMPI Mf, –.30 with MMPI F. Ss classified as showing overt sexual deviation obtained better ratings than those classified in neurotic or personality dis-

organization categories. It was concluded that "ratings of sexual differentiation on the DAP are a measure of general psychological deficits associated with degree of personality integration," not a measure of degree of sexual disturbance.—L. B. Heathers.

4321. Dalla Volta, Amedeo. **New aspects of the psychological problem of alcoholism.** *Scientia med. Ital.*, 1957, 5, 510-529.—More alcoholism comes from infantile and childish tendency to alcoholic beverages than is supposed. The alcoholism of neurotics may thus be only reactivated alcoholism. Predisposition should be defined in terms of early childhood experience.—W. L. Wilkins.

4322. Davidenkov, S. N., & Dotsenko, S. N. **Vozmozhno li izolirovannoe porazhenie zritel'nogo analizatora pervoi i vtoroi signal'noi sistemy? (Is an isolated lesion of the visual analyzer of the first and second signal systems possible?)** *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 525-531.—Cases are known of visual object agnosia unaccompanied by alexia. A case in reverse is presented: alexia with visual recognition of objects and drawings. The subject could identify similar letters and words and differentiate dissimilar ones. He could also readily form proper conditioned reflexes and differentiations to visual representations of certain words without understanding their meaning.—I. D. London.

4323. Dixon, James J., de Monchaux, Cecily, & Sandler, Joseph. **Patterns of anxiety: The phobias.** *Brit. J. med. Psychol.*, 1957, 30, 34-40.—A factor analytic study based on items of a psychological inventory administered to patients at a psychiatric clinic reveals one major factor and one secondary factor. The major factor is closely related to factors extracted from other groups of anxiety symptoms. The secondary factor contrasts fear of injury or pain with other fears and is interpreted as being consistent with the Freudian distinction between anxiety over loss of love-object and castration anxiety. It is concluded that fine distinctions regarding the object of the phobia are inconsequential and that "treatment of phobias by deconditioning (on the assumption that anxiety is a conditioned response)" is not appropriate. 26 references.—C. L. Winder.

4324. Frankenstein, Carl. **The psychodynamics of social behavior disturbances: A comparison of clinical units.** *Arch. crim. Psychodynamics*, 1957, 2, 82-106.—The thesis is developed that the classification of clinical units of dissocial behavior "should be based on a psychodynamically oriented definition of the 'essentials' discriminating between these units." This view is illustrated by an analysis of the pre-oedipal and oedipal types of the primary behavior disorder.—L. A. Pennington.

4325. Gershman, Harry. **Psychopathology of compulsive homosexuality.** *Amer. J. Psychoanal.*, 1957, 17, 58-77.—"Compulsive homosexuality is a symptom complex associated with extensive personality distortion. This distortion is initiated by the earliest experiences of the individual and perpetuated by the compulsive strategies evolved during the course of his existence. These constitute the neurotic aspect of his character structure. Homosexuality is essentially an outgrowth of acquired conflict relating to the whole person. It is the symbolic expression of a person's inner conflict in sexual language. What accounts for the specific choice of the symptom of

homosexuality is not clear. Specific experiential events apparently can cause a person to externalize his inner conflict on his sexual identity and use that as the shibboleth of his illness. The basic problem, however, remains one of alienation, compartmentalization, externalization, massive resignation, and emptiness." 18 references.—D. Prager.

4326. Hagnell, Olle, & Wretmark, Gerdt. **Peptic ulcer and alcoholism: A statistical study in frequency, behaviour, personality traits, and family occurrence.** *J. psychosom. Res.*, 1957, 2, 35-44.—Detailed medical and clinical study of 130 consecutive male cases of alcoholism seen at an outpatient clinic indicated that alcoholics with peptic ulcer, or with near relatives suffering therefrom, differed considerably from other alcoholics. The evidence suggested that ulcers and alcoholism in these instances are "different manifestations of a common basic disturbance." Additional research is needed to clarify observations reported. 22 references.—L. A. Pennington.

4327. Lawton, M. Powell, & Phillips, Roswell W. **The relationship between excessive cigarette smoking and psychological tension.** *Amer. J. med. Sci.*, 1956, 232, 397-402.—An empirical study demonstrating an association between tension and excessive cigarette smoking. Through the use of the Cornell Medical Index and an Adjective Check List it was found that "heavy smokers . . . exceed the group of moderate smokers and abstainers in various indices relating to the presence of 'nervous' traits." There were no differences between these groups in psychosomatic disorders or in childhood happiness.—B. H. Light.

4328. Lerner, Arthur. **Some exploratory comments on the psychodynamics of the alcoholic.** *J. correct. Psychol.*, 1956, 1(1 & 2), 11-20.—Interviews and discussions with alcoholics, dispensers of liquor, and professional personnel; group counseling of alcoholics; and a literature survey; suggest the following considerations in conducting psychotherapy with alcoholics: (1) family, general interpersonal, and vocational deterioration; (2) feelings of "social isolation"; (3) suggestibility to drinking; (4) "a tendency to manipulate people," be ambivalent, and not accept the responsibility for their drinking. Experimentation and rehabilitation should involve different fields. A brief review of the literature and illustrative verbatim comments are presented.—I. G. Weintraub.

4329. Navratil, L. **Tremor und andere motorischfunktionelle Störungen als ursächliche Faktoren bei der Entstehung der Trunksucht.** (Tremor and other disturbances of the motor functions as causative factors in the origin of alcoholism.) *Nervenarzt*, 1957, 28, 108-111.—4 case histories are presented which illustrate the role of preexistent tremor, tics, stuttering and nystagmus in the etiology of chronic alcoholism. Alcohol was originally consumed by these patients because it suppressed these motor disturbances and rendered the patient less self-conscious.—M. Kaelbling.

4330. Nichols, John Richard. **The experimental test of a general theory of addiction.** *Dissertation Abstr.*, 1957, 17, 1819-1820.—Abstract.

4331. Schwarz, Berthold Eric. **The man who was married 55 times.** *J. nerv. ment. Dis.*, 1956, 124, 287-291.—A case history and psychodynamic in-

terpretation is presented of a man who contracted 55 marriages during a period of 38 years.—N. H. Pronko.

4332. Singer, Richard G., & Shaw, Christopher C. **The passive-aggressive personality.** *U. S. Armed Forces med. J.*, 1957, 8, 62-69.—"In the last analysis the basic trouble with such a passive-aggressive personality is that the man has extremely poor motivation. He uses elaborate symptoms as an excuse for his failure to adjust to military service, and he places the blame on 'the brass' in general and the medical officer specifically. . . . The only way to deal with passive-aggressive personalities is first to rule out the possibility of any definite organic lesion as a basis for the 'symptoms.' Then they must be firmly returned to duty rather than referred for further examinations and hospitalization, which are and would continue to be entirely unwarranted."—G. H. Cramp-ton.

4333. Vermoere, W. **Een geval van ixothymie.** (A case of ixothymy.) *Tijdschr. Studie. Beroepsorient.*, 1957, 4, 53-59.—The characteristics of ixothymy show in the general attitude of the subject (16 years, 5 months) and in the results of the Wechsler-Bellevue and Rorschach tests. The Rorschach syndrome is almost a perfect example of ixothymy. French summary.—R. Piret.

4334. Vexliard, Alexandre. **Le clochard: Étude de psychologie sociale.** (The hobo: A social psychological study.) Bruges, Belgium: Desclée de Brouwer, 1957. 324 p. 200 fr. belg.—This is a comprehensive study of the contemporary vagabond. The social organization of vagabonds is described historically, together with an account of the daily existence of the 20th-century vagabond. Theories of an etiological nature are examined, the frequency of personality disorders is described and some attempt to provide a picture of the vagabond personality. The study is based upon and is illustrated by a series of case studies.—B. A. Maher.

4335. Wahl, C. W. **Some antecedent factors in the family histories of 109 alcoholics.** *Quart. J. Stud. Alcohol*, 1956, 17, 643-654.—All alcoholic admissions to Elgin, Illinois, State Hospital from June through December 1948 showed 44% Catholic, 35% Protestant, 1% Jewish, and 20% without religious affiliation. Clinical impression suggested that the Catholics were more often prone to severe conflict and guilt in areas relating to self-acceptance, and they seemed to have more frequent problems concerning sexuality. The typical admitted alcoholic has insecure relationship with one or both parents, and may have lost one by death or other causes during childhood. While mothers of schizophrenics tend to vacillate in their rejecting attitudes, mothers of alcoholics seem to be consistent.—W. L. Wilkins.

4336. Wattenberg, William W. **Boys who run away from home.** *J. educ. Psychol.*, 1956, 47, 335-343.—Records of 575 runaway boys dealt with by the Crime Prevention Bureau of the Detroit Police Department were analyzed. Among the findings: (1) peak chronological age of the runaways was 15, (2) over half of the boys' homes were intact, (3) there was a slight preponderance of first-born as compared to last-born, (4) sex of siblings was not significant, (5) in most cases, reason for running away was an interaction of several factors, (6) for a large pro-

portion of the group, search for adventure appeared to be the main motivation.—S. M. Schoonover.

4337. Wolf, E. **Auto-observation d'hallucinations en majorité lilliputiennes.** (Auto-observations on hallucinations mainly of a Lilliputian character.) *Ann. méd. psychol.*, 1957, 1, 2-34.—Recalling his own experiences during a salicylic intoxication, the author describes a particular type of localized hallucinatory phenomenon: the appearance of minute very active and one-dimensional visionary beings, which he calls "lilliputian." From these observations, he attempts to differentiate these transitory, mildly pleasurable, microptic visions from the terror-provoking and reality-shattering hallucinations of a more generalized character, and to formulate a new approach to the study of hallucinations.—M. D. Stein.

4338. Zuk, Gerald H. **The phantom limb: A proposed theory of unconscious origins.** *J. nerv. ment. Dis.*, 1956, 124, 510-513.—"This paper attempts to draw a certain parallel (but not an identity) between the dynamics of the phantom and the dynamics of the dream described by Freud. Both are viewed as products of the unconscious; both as regressive phenomena; both requiring as a necessary precondition certain restrictions on motility. It is hoped that future investigations of the phantom will furnish experimental documentation and support for this theoretical framework."—N. H. Pronko.

(See also Abstract 4537)

SPEECH DISORDERS

4339. Correll, Robert E. **Frequency analyses of EEG's of stutterers and normal speakers during photic stimulation.** *Proc. Iowa Acad. Sci.*, 1956, 63, 586-590.—Previous work has suggested a relationship between anxiety-proneness and certain EEG measures to photic stimulation. Anxiety has been used in some hypotheses concerning stuttering. It would then follow that stutterers should differ from non-stutterers on their EEG measures to stimulation. The present study comparing stutterers to non-stutterers did not reveal such differences.—C. F. Haner.

4340. Galifret-Granjon, Nadine. **Le développement du langage et ses troubles.** (Language development and disturbances.) *Année psychol.*, 1956, 56, 75-90.—A review of the work in language development and studies in stuttering and stammering. Studies are now more general, less limited to a particular aspect than formerly. The importance of audition in speech, of auditory perception, etc., are more stressed. 52 references.—G. Rubin-Rabson.

4341. Markova, E. D. **Osobennosti narusheniia neirodinamiki pri amnesticheskoj afazii.** (Features of neurodynamic disturbances in amnesic aphasia.) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 344-353.—In a study of the neurodynamics and disturbances of interaction between the 2 Pavlovian signal systems in cases of amnesic aphasia, a clinical examination of the aphasics' speech was made, conditioned motor reflexes were studied employing verbal reinforcement, and an association test was run. Analysis of the data makes it possible to reveal some of the mechanisms underlying amnesic aphasia: "weakness of the excitatory process, easy development of transmarginal inhibition, stronger successive

negative induction, and diminished mobility of the nervous processes."—I. D. London.

4342. Vermeulen, R. **A musical instrument for deaf-mute children.** *Philips tech. Rev.*, 1957, 18, 276-278.—A wind instrument for the development of speech in deaf-mute children is described. The notes are individually selected when the child depresses a piano-type key on a keyboard. The intensity, start, duration, and thus also the rhythm are controlled by breathing through a mouthpiece into a tube. Breath control basic to speech is developed in this manner. Statistical comparisons show significantly greater improvement by this method as compared to a more typical method.—R. W. Burnham.

(See also Abstracts 3554, 4111, 4117)

CRIME & DELINQUENCY

4343. Amano, Makio. **Saihan yosoku ni okeru category sūryōka no hikaku.** (Comparison of certain techniques for category quantification in the prediction of second offence.) *Jap. J. educ. Psychol.*, 1956, 3, 164-168.—In quantifying 15 factors and 22 categories which were found to be useful to diagnose follow-ups of criminals, 4 techniques were compared: (1) Hayashi's method for parole prediction; (2) Glueck's method used for delinquent juveniles; (3) weighting categories according to the proportion of repeated offences and recovery; and (4) simple weighting of +1, 0, and -1 to preventive, neutral, and facilitative factors of the second offence, respectively. No significant differences in accuracy in prediction was found among them. They fell between 88% and 74% in correct prediction. English summary, p. 186-187.—S. Ohwaki.

4344. Beall, Herbert S., & Panton, James H. **Use of the Minnesota Multiphasic Personality Inventory as an index to "escapism."** *J. clin. Psychol.*, 1956, 12, 392-394.—To construct an "escapism" scale to aid in the custody assignment of prisoners, the MMPI was given over a year period to all literate, male, felon admissions of a prison (N = 413). Of this group 103 had escaped from custody at some time. A random group of 100 cases was taken from the non-escapee remainder. The 42 items which differentiated these groups at the 1% level were given to 103 Ss admitted during a subsequent three month period. Using 18 as the cut-off point, 77% of the escapees and 78% of the non-escapees in the cross-validation group were identified. Since the mean MMPI profiles of the escapee-non-escapee groups were markedly similar, the scale appears to be measuring something independent of the regular MMPI clinical scales. The items and their scoring direction are listed.—L. B. Heathers.

4345. Blanchard, W. H. **Medieval morality and juvenile delinquency.** *Amer. Imago*, 1956, 13, 383-398.—Juvenile offenders frequently present a combination of a severely restrictive moral attitude and relatively loose moral behavior. Their problem is not a lack of values, but a conflict between strong impulsive urges and inflexible moral standards. One is reminded of the "peculiar blend of sensuality and unrealistic idealism that was so characteristic of the Middle Ages. . . . An investigation of the comparative psychodynamics of medieval man and the modern juvenile delinquent might give us greater insight into

the culture of the one and the subculture of the other."—*W. A. Varvel.*

4346. Cesarman, F. C. Religious conversion of sex offenders during psychotherapy: Two cases. *J. Pastoral Care*, 1957, 11, 25-35.—2 cases of religious conversion during psychotherapy—one a 37-year-old white widower, the other a 41-year-old white married male—are presented in detail. The author considers the improvement of these patients in 3 steps, namely (1) understanding the relationship between the exhibitionist and the observer, (2) the therapist's taking the place of the observer, and (3) tolerating a strong relationship with the church that becomes the object that will give security to the patient and where he will be able to channelize his impulses.—*O. Strunk, Jr.*

4347. Corsini, Raymond J. Two therapeutic groups that failed. *J. correct. Psychol.*, 1956, 1(3 & 4), 16-22.—"... correctional psychology is not and can not attain its majority unless the climate of the institution is favorable." Detailed attempts at group therapy in a girl's and a boy's correctional school failed because the permissiveness and confidentiality of therapy was inconsistent with the general punishment philosophy of the institution. Imprisonment must employ psychotherapy "as a matter of improving social capacity" and overcome the stagnation of testing alone. Common understanding, discussion of facts, and analyses of failures by administrators and professionals are suggested as initial steps to solution of the conflict.—*I. G. Weintraub.*

4348. Diamond, Bernard L. With malice aforethought. *Arch. crim. Psychodynamics*, 1957, 2, 1-45.—The evolution of the legal concept of criminal intent is described with special emphasis placed upon the modern conflict (Durham and Wells cases) in interpretations offered by the lawyer and the psychiatrist. 43 references.—*L. A. Pennington.*

4349. Diana, Lewis. The rights of juvenile delinquents: An appraisal of juvenile court procedures. *J. crim. Law Criminol.*, 1957, 47, 561-569.—This critical evaluation, with documentation, depicts the need in the United States for reexamination, modification, and re-writing of current laws relating to the form and functions of the juvenile court system.—*L. A. Pennington.*

4350. Gould, Irwin Bernard. Drug addiction and delinquency: An experimental study in persistence under changing conditions of reinforcement. *Dissertation Abstr.*, 1957, 17, 1606-1607.—Abstract.

4351. Grant, J. Douglas. The use of correctional institutions as self-study communities in social research. *Brit. J. Delinq.*, 1957, 7, 301-308.—"Why not allow our incarcerated to contribute to our culture as participating observers, workers, and subjects in social experimentation?" The author then describes an experiment by the Navy of this type ongoing at The Retraining Command, Camp Elliott, San Diego, California.—*L. A. Pennington.*

4352. Hodges, Donald Clark. Crimes against property. *Arch. crim. Psychodynamics*, 1957, 2, 47-81.—The sociologist presents an analysis of the meaning of the legal term. The conclusion is reached that the "conventional conception . . . is, in one respect, too broad, and, in another respect, too narrow." 37 references.—*L. A. Pennington.*

4353. Kammerer, Th. La relation entre médecin et inculpé dans l'expertise mentale criminelle. (The relationship between doctor and defendant in mental assessment of criminals.) *Evolut. psychiat.*, 1956, 2, 433-445.—The traumatic shock of being subjected to legal procedures, judged an outcast, and placed in the penitentiary, wreaks emotional havoc in non-recidivists. Therefore, institutionalization is followed by elaboration of compensatory defense mechanisms. Moreover, the psychiatrist's role is complicated by the fact that legal, psychological, and ethical considerations place him between the Scylla of affirmation and the Charybdis of negation of the offender's behavior. Furthermore, the criminal's affective perception of the expert's role as sympathetic or hostile provokes varied reactions. In the discussion which followed this treatise, other experts agreed that the interviewer sets the affective tone of the relationship, and that subconscious social attitudes influence rapport.—*L. A. Ostlund.*

4354. Karpman, Ben. Uxoricide and infanticide in a setting of oedipal jealousy. *Arch. crim. Psychodynamics*, 1957, 2, 109-141.—A case report developed via interview material obtained from the offender.—*L. A. Pennington.*

4355. Kaslow, Audrey A. R. Como se combate la delincuencia juvenil en California. (How juvenile delinquency is combated in California.) *Bol. Inst. int. amer. Prot. Infanc.*, Montevideo, 1956, 30, 324-332.—Juvenile delinquency is a complex problem with more than one solution. The efforts to treat delinquency should have a complex integrated program. The program of the City of Los Angeles is described, mentioning the work of thirteen agencies.—*M. J. Vargas.*

4356. Peizer, Sheldon B. Effect of incarceration on the direction of aggressive behavior. *J. correct. Psychol.*, 1956, 1(1 & 2), 26-31.—The Rosenzweig Picture Frustration Test was administered to 2 randomly selected groups of 40 inmates each, roughly matched for age, intelligence, and education. One group was imprisoned a minimum of 3 years; the other was imprisoned a maximum of 1 year. Statistical comparison of the E., I., and M. categories confirmed the author's predictions that length of imprisonment of delinquents: (1) effects slightly less extra-aggressiveness, (2) results in significantly more intra-aggressiveness, and (3) alone effects "little motivation for real personality change." Discussion of the dynamics of the results and a list of intrapunitive characteristics follow.—*I. G. Weintraub.*

4357. Podolsky, Edward. The diseased brain and homicide. *J. nerv. ment. Dis.*, 1956, 124, 621-624.—A number of case histories is presented as evidence of the thesis that "criminal activity has resulted in some cases of brain disease."—*N. H. Pronko.*

4358. Schenke, Lowell W. Psychology's concern with criminal behavior. *J. correct. Psychol.*, 1956, 1(1 & 2), 21-25.—While each discipline in the field of correction views a criminal differently, scientific retraining of the offender as an individual, without the "spirit of retaliation," should be the concerted goal in rehabilitation. The prison psychologist, with his knowledge of the offender's "intellectual capabilities, vocational aptitudes and interests, and personality structure," can significantly contribute

to the retraining process. Although the immediate future looks poor because of the low number of psychologists to prisoners, long range possibilities appear brighter.—*J. G. Weintraub.*

4359. Vold, George B. *Theoretical criminology.* New York: Oxford Univer. Press, 1958. xi, 334 p. \$5.00.—The volume was designed to serve as a text or supplement for advanced courses and seminars in Criminological Theory, Social Theory and Social Conflict. Part I presents the traditional schools of criminology. Part II deals with theories centering on peculiarities or abnormalities of the individual. The third part of the volume concerns theories centering on group or cultured influences as related to crime and deals with economic conditions and criminality, crime as normal learned behavior, group conflict theory as an explanation of crime, the organization of criminals for profit and power, white collar crime. The final portion of the volume reviews criminological theory in relation to research and penal practice. 171-item bibliography.—*A. Bassin.*

4360. Witmer, Helen L., & Kotinsky, Ruth. (Eds.) *New perspectives for research on juvenile delinquency: A report of a conference on the relevance and interrelations of certain concepts from sociology and psychiatry for delinquency, held May 6 & 7, 1955.* U. S. Child Bur. Pub., No. 356, 1956. vii, 92 p.—"On the assumption that there is more known than is being used and that in the theories of forefront sociologists and psychologists there is much that is relevant that has not yet been explored, the conference was called. Its charge was to consider 2 sets of ideas described in the writings of Erik Erikson and Robert Merton, their possible relation to each other, and their relevance for research in delinquency." Erikson spoke (session 1) on "Ego identity and the psychosocial moratorium." Merton discussed (session 2) "The social-cultural environment and anomie." Sessions 3 and 4 were devoted to discussion and efforts toward rapprochement. Discussants included: Isidor Chein, Richard Cloward, Bernard C. Fisher, Charles P. Gershenson, Raymond F. Gould, Solomon Kobrin, Bernard Lander, Peter B. Neubauer, Fritz Redl, and Julius Teller.—*L. A. Pennington.*

(See also Abstracts 4265, 4336, 4399)

PSYCHOSES

4361. Abad, Mauricio. *Consideraciones psicoanalíticas acerca de algunos aspectos de una psicosis con amaurosis congénita.* (Psychoanalytic considerations of some aspects of a psychosis with congenital blindness.) *Rev. Psicoanal., B. Aires*, 1956, 13, 21-40.—English, French and German summaries.

4362. Abrams, Julian. *Chlorpromazine in the treatment of chronic schizophrenia: A comparative investigation of the therapeutic value of chlorpromazine in effecting certain psychological and behavioral changes in chronic schizophrenic patients.* *Dissertation Abstr.*, 1957, 17, 1589-1590.—Abstract.

4363. Abse, D. Wilfred; Curtis, Thomas E., Dahlstrom, W. Grant; Hawkins, David R., & Toops, Thorndike C. *The use of reserpine in the management of acute mental disturbance on an*

in-patient service: Preliminary report. *J. nerv. ment. Dis.*, 1956, 124, 239-247.—"Thirty-six acutely upset psychiatric in-patients, randomly assigned to one of three treatment groups for day-time sedation of their high anxiety and tension or their difficulties in ward management, were studied over a week's time. The effects of moderate dosages of reserpine, powdered opium and an inert placebo were studied by means of carefully recorded nursing observations, anxiety ratings and psychological test performance. No systematic difference ascribable to reserpine could be found except a lack of improvement on the peg-board task comparable to the changes in the opium and placebo groups. A tentative conclusion was made that reserpine offers little in the way of amelioration of acute psychiatric upset within this hospital setting over and above the psychological effects from the milieu and the treatment regime."—*N. H. Pronko.*

4364. Aisenberg, Ruth B. *The cumulative differential effects of reward and punishment on the performance of schizophrenic and normal subjects.* *Dissertation Abstr.*, 1957, 17, 2077-2078.—Abstract.

4365. Balonov, L. IA., Lichko, A. E., & Traugott, N. N. *Ugnenie i vosstanovlenie vysshei nervnoi deiatel'nosti pri nekotorykh patologicheskikh sostoiianiakh.* (Depression and restoration of higher nervous activity in certain acute pathological states.) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 335-343.—The course of depression and restoration of higher nervous activity was studied in cases of insulin coma, convulsive seizures, and acute infectious psychoses. It was found that the "succession of depression of different unconditioned reflexes corresponds to their emergence in ontogenesis." Those conditioned reactions which were formed in early childhood, are well stabilized, simple in their functional structure, and most closely connected with unconditioned activity, endure the longest and are the first to be restored. This is true of both directly conditioned reactions and all kinds of verbal activity.—*I. D. London.*

4366. Barnes, Robert H., Busse, Ewald W., & Friedman, Edward L. *The psychological functioning of aged individuals with normal and abnormal electroencephalograms: II. A study of hospitalized individuals.* *J. nerv. ment. Dis.*, 1956, 124, 585-593.—"This study reports on the EEG findings in a group of 198 hospitalized elderly individuals of 60 years of age or above. An attempt is made to correlate the major EEG categories (i.e., normal, focal, mixed and diffuse) with both the clinical, diagnostic groupings and the current intellectual functioning as measured by Wechsler Intelligence scales. The findings in this hospitalized group are compared with those for a group of functioning community volunteers within the same age range. Certain conclusions are suggested on the basis of these findings." 19 references.—*N. H. Pronko.*

4367. Bender, Lauretta, & Hitchman, Irene L. *A longitudinal study of ninety schizophrenic women.* *J. nerv. ment. Dis.*, 1956, 124, 337-345.—In 1955-56, 26 years after a 1929-30 study at Springfield State Hospital and 26-40 years after an initial diagnostic evaluation of a group of 90 schizophrenic patients, the authors made another follow-up of the case material in order to throw light on longitudinal

factors. The present report stresses biological factors, particularly hereditary, constitutional and developmental disturbances. Continuity of the schizophrenic pattern, spontaneous remissions and response to treatment are also given some consideration.—N. H. Pronko.

4368. Bilikiewicz, Tadeusz; Sulestrowski, Waldemar, & Wdowiak, Leonard. Les résultats du traitement de la paranoïa et de la paraphrénie par le largactil. (Results of the treatment of paranoia and paraphrenia Kraepelin's terminology with thiorazine.) *Ann. méd. psychol.*, 1957, 1, 52-69.—The removal of the morbid symptomatology in paranoia is all the more desirable since, in contrast with paranoid schizophrenic states, the personality as a whole remains fairly intact and the disease self-limiting. Thorazine is presented as the treatment of choice for the true paranoias. It is described by the authors as an amazingly effective therapeutic agent, even though it seems necessary to keep the remitted patients on a maintenance dose of thiorazine (25 to 200 mg, the full dosage being prescribed from 250 to 800 mg daily).—M. D. Stein.

4369. Boszormenyi-Nagy, Ivan; Gerty, Francis J., & Kueber, Jacqueline. Correlation between an anomaly of the intracellular metabolism of adenosine nucleotides and schizophrenia. *J. nerv. ment. Dis.*, 1956, 124, 413-416.—Recently admitted female schizophrenics and a control group of student nurses were subject to a blood analysis. Statistically significant but overlapping differences were found. These are theoretically evaluated.—N. H. Pronko.

4370. Campbell, Dugal. The effect of electric convulsive treatment upon certain psychological functions in depressed patients. *Bull. Brit. psychol. Soc.*, 1957, 32(Inset), 4.—Abstract.

4371. Chapman, Loren J. Distractibility in the conceptual performance of schizophrenics. *J. abnorm. soc. Psychol.*, 1956, 53, 286-291.—This study explores the role of interfering factors in the conceptual performance of schizophrenics. 40 schizophrenic patients at the Downey Hospital and 25 normals were used as Ss. They were required to sort cards containing 4 figures with 3 four-figured standard cards. One figure on each standard card was arbitrarily designated as correct for sorting. More of the schizophrenics than the normals used the incorrect "distracter" as a basis for sorting, even when conceptual sorting was required. The results support the hypothesis that schizophrenics fail conceptual tests because response to distracters prevents the demonstration of his concept-forming ability.—A. S. Tamkin.

4372. Clark, Lincoln D., & Eik-Nes, Kristen. Psychophysiological studies on schizophrenic patients. *J. nerv. ment. Dis.*, 1956, 124, 473-477.—5 cooperative schizophrenic patients were administered cortisone for 20 days. Blood samples were analyzed during this period and following withdrawal. Serum 17-hydroxycorticosteroids, critical flicker frequency, and electroencephalographic tracings were analyzed for class-correlations. These are presented and discussed.—N. H. Pronko.

4373. Deglin, V. IA. Issledovanie rasstroistv sna pri shizofrenii. (A study of sleep disturbances in schizophrenia.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 680-689.—In patients in a state of catatonic stupor,

with a more sharply pronounced picture of inhibition of the motor analyzer, night sleep was not profound and of short duration. EEGs made during night sleep hardly differed with respect to their frequencies from those taken during daytime. Patients with a less inhibited motor analyzer slept much better at night, and their EEG's made at night and during daytime were quite different. The night sleep of patients with a paranoid form of schizophrenia rather resembles the sleep of healthy persons. According to the procured EEGs profound night sleep in schizophrenia does not differ from that in healthy persons.—I. D. London.

4374. Dewhurst, Kenneth, & Todd, John. The psychosis of association: Folie à deux. *J. nerv. ment. Dis.*, 1956, 124, 451-459.—Gralnick's concise definition of folie à deux sets the stage for a brief historical review of this disorder. 5 new cases of folie à deux are then presented and the paper closes with a list of criteria believed to be essential for meeting a diagnosis of folie à deux. 22 references.—N. H. Pronko.

4375. Ejima, T., Tanaka, Z., Kikuchi, J., & Yoshida, T. On the cerebral metabolism of hexosamine in normal adults and schizophrenic patients. *Folia psychiat. neur. Jap.*, 1956, 10, 173-180.—Serum hexosamine blood content was measured spectrophotometrically in 35 acute schizophrenic patients, 12 chronic schizophrenics and 17 normal controls. In the normal group serum hexosamine values were consistently lower in blood samples drawn from the internal carotid artery than in those from the jugular vein and, in turn, the latter were lower than those from the median cubital vein. Average values were consistently higher for female subjects than for males. In the schizophrenic subjects no difference was found in hexosamine content in the samples from the 3 sites. In general the values for the schizophrenics were higher than for controls, though they fell within the normal range. Values for female schizophrenics were higher than for male patients. 19 references.—M. L. Simmel.

4376. Ey, Henri, & Sakellaropoulos, P. L'état primordial du délire et l'action thérapeutique de la chlorpromazine. (The primordial state of delirium and the therapeutic action of chlorpromazine.) *Evolut. Psychiat.*, 1956, 2, 489-497.—Details are given with regard to a female schizophrenic who was treated successfully by chlorpromazine. The patient's delirium was characterized by themes of jealousy and persecution. This case is cited as typical of the primordial state of delirium which constitute a pathological deconstruction of conscience. Essentially, this concept introduced by Moreau de Tours as a result of his experiences with hashish applies when the individual takes refuge in imaginary experiences which are elaborated by defense mechanisms to the point where they become experienced as real. Furthermore, these symptoms resemble those resulting from drug addiction, brain damage, and acute physiological suffering. Moreover, similar behavior follows the action of certain alkaloids and viruses.—L. A. Ostlund.

4377. Farina, Amerigo, & Webb, Warren W. Premorbid adjustment and subsequent discharge. *J. nerv. ment. Dis.*, 1956, 124, 612-613.—From available hospital records ratings of patients were made

on the Phillips premorbid adjustment scale as to the patients' premorbid social and sexual adjustments. It was found that there was only a slight relationship between the premorbid adjustment of schizophrenic patients and their ability to remain out of the hospital on an early trial visit. However, premorbid adjustments were found to be significantly related to the patients' later (4 to 10 years) stay out of the hospital. The possible usefulness of this approach is discussed.—N. H. Pronko.

4378. Fedoroff, S., & Hoffer, A. Toxicity of blood serum from schizophrenic and non-schizophrenic subjects. *J. nerv. ment. Dis.*, 1956, 124, 396-398.—"Blood serum from schizophrenic and surgical patients was highly toxic to strain L cells, whereas serum from healthy adults and from non-schizophrenic mental patients was in most cases less toxic. There was no significant difference in the toxicity of serum from healthy adults and from non-schizophrenic mental patients. There was good correlation between degree of serum toxicity, Lewis and Piotrowski score and the clinical diagnoses."—N. H. Pronko.

4379. Ferguson, John T. Doxylamine: A new compound for the symptomatic treatment of schizophrenia. *J. nerv. ment. Dis.*, 1956, 124, 377-380.—"The properties of an antihistamine, Doxylamine, long used in small doses for treatment of allergies, has been tried recently in large doses in the treatment of psychotic patients. Experience with its use in psychotherapy is described."—N. H. Pronko.

4380. Freeman, Richard V., & Friedman, Irwin. Art therapy in a total treatment plan. *J. nerv. ment. Dis.*, 1956, 124, 421-425.—"The place of art therapy in the total treatment of the psychotic patient is indicated and its function in restoring or reconstructing the integration of his personality is shown with illustrative case histories."—N. H. Pronko.

4381. Freeman, T., McGhie, A., & Cameron, J. L. The state of the ego in chronic schizophrenia. *Brit. J. med. Psychol.*, 1957, 30, 9-18.—"Clinical observation of chronic schizophrenics showing dementia are used to clarify the interpretation that 'the symptoms which the schizophrenic patient presents can be viewed as an outcome of disorder in the dynamics and economics of ego activity.' In particular, the ego boundaries become obscure with the impaired sense of ego feeling and self-perception, and self-definition. Among the phenomena observed are instances of transient primary identification with ward personnel, the deterioration of percept into hallucinations, disturbances of memory with respect to time of the actual event and subjective ownership of the memory, and displacement and condensation. 'Reflective awareness' seems lost and therapeutic efforts should be directed toward reintegration of this and other secondary processes."—C. L. Winder.

4382. Fujita, Yukihiro. Über die tetanoiden zeichen an der endogenen psychose. (Tetanoid signs in endogenous psychosis.) *Folia psychiat. jap.*, 1956, 10, 147-162.—"Examination of 69 schizophrenic patients, 23 manic depressives, 13 neurotics and 10 patients with neurological diseases yielded the following major findings: Erb's phenomenon is almost always positive in patients who are disoriented, stuporous or in whom paranoid hallucinations are major symptoms. Erb's phenomenon is

rarely positive in patients with catatonic or hebephrenic symptomatology. Patients with little or no deterioration are more likely to show the sign than markedly deteriorated patients. When the schizophrenics are grouped according to Mitsuda's classification, most of the typical schizophrenics do not show Erb's phenomenon, while it is positive in one-half of the atypical group. The phenomenon was also present in 5 manic depressives who were either disoriented manics or anxious agitated depressives. Serum calcium content was largely within normal limits. 30 references.—M. L. Simmel.

4383. Gunne, L. M., & Holmberg, G. Electroencephalographic changes in a typical case of periodic catatonia. *Acta psychiat. Kbh.*, 1957, 32, 50-57.—"The onset of an attack was accompanied by diffuse irregular slow activity, resembling that in a drowsy state. This abnormality reached its peak at the height of an attack. As it decreased a regular 3 c/s activity along with regular alpha rhythm took its place. The relation of these findings to the sleep function and endocrine changes is discussed. 8 references.—R. Kaelbling.

4384. Halmosha, E. Hafraot nafshiyot bekesher laleda. (Emotional disturbances after birth.) *Harefuah*, 1957, 52, 142-144.—"A statistical account of post partum psychoses in Israel is given. Somewhat more than 10.8% of 497 females entering the hospital during 18 months had given birth during the preceding year. Symptomatology cases are divided into confusions (17) and depressions (29). The problem of diagnosis in post partum emotional disturbances is discussed, social and economic factors are noted, and the treatment is explained. Prognosis is considered favorable. English and French summary.—H. Ormian.

4385. Heller, Emma May Testai. A comparison of the oral language of schizophrenics before and after prefrontal lobotomy. *Dissertation Abstr.*, 1957, 17, 2086-2087.—Abstract.

4386. Hickerson, G. X., Jr., Swain, J. M., & Tempey, F. W. Reserpine in acute psychotic states. *J. nerv. ment. Dis.*, 1956, 124, 614-617.—"2 groups of 25 acutely psychotic patients each were assigned to a study in which one group was given Serpasil and the other placebo, by a double blind technique. A third group of subjects was drawn from these 2 which received EST after unsuccessful trial on either Serpasil or placebo. The results achieved are discussed."—N. H. Pronko.

4387. Hoffer, A. Epinephrine derivatives as potential schizophrenic factors. *J. clin. exp. Psychopath.*, 1957, 18, 27-60.—"Epinephrine is shown to play a vital role in emergency reactions and anxiety states. It is hypothesized that in schizophrenia both branches of the autonomic nervous system are overly active as a result of an overproduction of both acetylcholine and epinephrine. French and Spanish summaries. 141-item bibliography.—S. Kastruck.

4388. Jurcisin, George. Social dancing as a therapeutic medium with long term neuropsychiatric patients. *J. Ass. phys. ment. Rehab.*, 1957, 11, 51-55.—"12 long term patients are studied by rating scale methods and clinical observation during a 9-week interval during which social dancing was taught and encouraged. Ratings indicated improvement in 5 of 6 variables.—L. A. Pennington.

4389. Kalmus, Ernst Elyakim. **Al psikhoza manit-depresivit beyisrael.** (On manic-depressive psychosis in Israel.) *Harefuah*, 1957, 52, 150-151.—Sichel's assertion is tested that this disease is more widespread among Jews than among non-Jews. 200 cases were observed in Israel, 17% of them manic-depressive ones. In Israel, the symptomatology itself doesn't differ from that abroad, but the disease is more frequent, and has a specific character caused by the parallelism between the basic feature of the illness and the "Jewish character": immense affectivity, hyperkinesis, altruism and perhaps musical ability.—H. Ormian.

4390. King, Gerald F. **Withdrawal as a dimension of schizophrenia: An exploratory study.** *J. clin. Psychol.*, 1956, 12, 373-375.—Is the withdrawal associated with schizophrenia a unitary trait? Withdrawal from inter-personal contacts was measured by ratings from the group therapist and from the charge-attendant of the ward; withdrawal from things was measured by the rating of the occupational therapist and the number of pulls made on a vending-type machine during three trials when the reward—candy or cigarettes—was steadily reduced. All 4 measures had reliabilities in the .80's. Ss were young, acute schizophrenics in a VANP hospital. The inter-correlations between the 4 measures were very similar for two independent samples with Ns of 13 and 11. Though the similar measures were significantly related, the dissimilar measures—person vs. thing—were not significantly related.—L. B. Heathers.

4391. Kulcer, Shelomo. **Omanut hatsiyur shel holey ruah.** (Drawing of mentally disturbed.) *Ofakim*, 1957, 11, 7-15; 37.—The concept "patho-aesthetics" is explained, and its beginning briefly described. Only psychoanalysis enabled a right understanding of its facts and problems. The problems discussed are: drawing and mental disease, disturbances, content of drawing, their style and color. "Drawings of schizophrenics hint that the higher functions are diminished and the pattern of body is disturbed. . . . Surprisingly, they resemble drawing of organically ill. . . . The influence of schizophrenia on artistic creation is both destructive and creative." There is a similarity (not only external) between the schizophrenic and the modern painting.—H. Ormian.

4392. Machover, Karen, & Zadek, Mildred. **Human figure drawings of hospitalized involuntals.** *Psychiat. Quart. Suppl.*, 1956, 30, 222-240.—50 male and 50 female hospitalized involuntals were less individually differentiated and less mature than most adult groups of similar age, intelligence, and educational status. The sex of the figure drawn is difficult to determine. Clothing is underplayed. Repression and barrenness pervade the drawings. Isolation, emptiness, and constriction are reflected clinically and graphically. Is the person who fails to evolve or grow the one who is likely to suffer from an early and aggravated involuntal period which is severe enough to necessitate hospitalization? Hypotheses and conclusions offered are generalized and tentative.—D. Prager.

4393. Mangel, H. **Tipul psikiatri behafraot nefesh bazikna.** (Psychiatric treatment of mental disorders in the aged.) *Harefuah*, 1957, 52, 137-142.—In the hospital, 63.3% of 68 aged people with men-

tal problems were psychotic. Psychotic cases with deterioration showed a slighter tendency to (temporary or stable) improvement than cases without deterioration. 14 of 30 discharged cases were readmitted from homes for aged, but many of them improved in the hospital due to the better atmosphere and treatment. In some cases the interruption of the patients' ties with their sources of habitual sociobiological attachments were indicated as an additional factor causing mental disturbances with aged. English and French summary.—H. Ormian.

4394. Marrazzi, Amedeo S., & Hart, E. Ross. **An electrophysiological analysis of the actions of some drugs useful in the therapy of psychotic disorders.** *J. nerv. ment. Dis.*, 1956, 124, 388-392.—The transcallosal preparation has been used which permits stimulating one optic cortex in the lightly nembutalized cat and initiating an impulse that terminates in symmetrical points in the contralateral optic pathway thus producing a series of potentials recorded at the surface of the cortex. A series of drugs have been used in order to study their cerebral effects. Theoretical implication of these results are discussed.—N. H. Pronko.

4395. Masterson, James F., Jr. **Prognosis in adolescent disorders: Schizophrenia.** *J. nerv. ment. Dis.*, 1956, 124, 219-232.—Follow-up information ranging from a span of 5 up to 19 years was obtained on a group of 153 adolescent patients between the ages of 12 and 18 years, hospitalized at the Payne Whitney Psychiatric Clinic. A rank t test was used to determine the relationship between clinical factors used for prognosis and later actual adjustment. Prognostic factors are related to favorable or unfavorable outcome or to unrelated factors. 36 references.—N. H. Pronko.

4396. Meyer, H. H. **Die Phenothiazin- und Reserpinbehandlung der Psychosen.** (The treatment of psychoses with Phenothiazine and Reserpine.) *Psychiat. Neurol. med. Psychol., Leipzig*, 1957, 9, 78-83.—The indications of Phenothiazine and Reserpine are discussed and their effectiveness is compared. After failure of one drug, the other should be tried. In symptomatic psychoses and in psychomotor restlessness Phenothiazine is superior. The hypothesis is advanced that these drugs have curative effect beyond mere symptomatic belief.—C. T. Bever.

4397. Mielke, F. A. **Anamnese und Katamnese reserpinbehandelter Schizophrener.** (Gleichzeitig ein Beitrag zur Methodik der Arzneimittelpfung in der Psychiatrie.) (Previous history and follow-up of schizophrenics treated with Reserpine. (Also a contribution to the methodology of testing drugs in psychiatry.)) *Nervenarzt*, 1957, 28, 111-119.—232 schizophrenics were classified according to the "spontaneous" course of their disease before being given Reserpine for about four weeks in varying forms and dosages. Results were rated on a six point scale. Except for more frequent short term improvement, results were good only in patients whose prognosis was considered good in any case. Constitutional types did not differ significantly.—M. Kaelbling.

4398. Milici, Pompeo. **The hebephrenic dementia precox reaction.** *Psychiat. Quart. Suppl.*, 1956, 30, 264-282.—The hebephrenic reaction is the result of the failure of adjustment in reality of the constitutionally predisposed schizoid personality make-up.

"The emotional instability and shallowness, the unlogical thought processes and falsifications of memory, the peculiarities of behavior, the depressive, inhibitory, hypochondriacal, euphoric, paranoid, and grandiose tendencies become more marked, and, as the person abandons reality, there is increasingly loss of affect, and incoherence and incongruity of affect, thinking, and behavior. There may be sporadic, evasive, regressive behavior. But, if the inner resources are insufficient, if the external pressures are too great, there results a disintegration of personality in which the fears and the hopes, the hates and the wishes assume dominance, only to dissolve in deterioration."—D. Prager.

4399. Nelson, Robert L. Psychotics who commit offenses punishable by court-martial. *U. S. Armed Forces med. J.*, 1957, 8, 243-253.—"Data on five cases of schizophrenic reaction showed that all had prolonged delays in diagnosis and treatment; all had undergone general courts-martial, had been found guilty, and had begun sentence; and all were found on subsequent evaluation to have been psychotic prior to and at the time of their offenses. Recommendations are made to aid in early diagnosis and timely institution of appropriate treatment."—G. H. Cramp-ton.

4400. Papez, James W., & Papez, B. Pearl. Drops of protein in brains of hospital patients. *J. nerv. ment. Dis.*, 1956, 124, 361-370.—In a series of 612 brains of psychotic patients, 148 brains as well as 14 brains of a total of 67 of mentally deficient patients showed the presence of mucus-like droplets of protein and other conditions. These conditions were numerous in patients with clouded states, disorientation, stupor, catatonia, uremia and "edema" of the brain. 21 references.—N. H. Pronko.

4401. Peak, Ernestine C., Canestrari, Robert E., & Roebuck, Basil E. The effects of Frenquel upon disturbed patients. *J. nerv. ment. Dis.*, 1956, 124, 504-506.—60 female chronic patients were administered Frenquel in divided doses totalling 60 mgm. daily for one month. It was found that Frenquel did not significantly decrease delusions and hallucinations or improve ward adjustment. In fact, it is suggested that the drug decreased inhibitions and that it had a negative effect upon ward adjustment.—N. H. Pronko.

4402. Pilkington, T. L. The coincidence of rheumatoid arthritis and schizophrenia. *J. nerv. ment. Dis.*, 1956, 124, 604-606.—Among an unselected group of 360 chronic mental hospital women patients over the age of 40, 5 were found to have rheumatoid arthritis in contrast to an anticipated 11-14 (3-4%). Among 130 schizophrenics the incidence was either 0 or .8%. These findings and their explanations are discussed.—N. H. Pronko.

4403. Rustebakke, Albert Ronald. Achievement motivation before and after frustration and its relation to manifest anxiety in schizophrenic patients. *Dissertation Abstr.*, 1957, 17, 1587-1588.—Abstract.

4404. Singer, Jerome L., & Spohn, Herbert E. The response of schizophrenic patients to a televised World Series game: A study in social isolation. *J. abnorm. soc. Psychol.*, 1956, 53, 375-377.—This study is an initial effort to demonstrate the so-

cial isolation of schizophrenic patients and to test certain hypotheses relating social isolation to chronicity and severity of illness. Using a standardized rating sheet, 8 clinical psychologists were stationed on wards of a large mental hospital to observe the responses of patients during a televised World Series baseball game. The results showed that on the whole the game drew an unusually small audience. There was a striking absence of social response in terms of interaction between patients or with the game. This study, thus, highlights the schizophrenic's immense alienation from social interchange.—A. S. Tamkin.

4405. Smith, Frieda L., Simon, Alexander, & Lingoes, James C. Excretion of urinary corticoids in mental patients. *J. nerv. ment. Dis.*, 1956, 124, 381-387.—The activity of the adrenal cortex in mental patients before, during, and after electroshock therapy was studied by analysis of urinary corticoids. Selected patients (including schizophrenics and those with affective disorders) were compared with normals. The results are reported and discussed. 34 references.—N. H. Pronko.

4406. Solyom, L., & Varga, E. Neue experimentelle Angaben zur Pathophysiologie der Schizophrenie und der Psychasthenie. (New experimental data to the pathophysiology of schizophrenia and psychasthenia.) *Psychiat. Neuro. med. Psychol., Leipzig*, 1957, 9, 73-78.—A previously described, special conditioned reflex was used to test the correlation of the first and second signal system in 8 schizophrenics, 6 psychasthenics, and 8 normals. The results are reported and analyzed. In schizophrenia and psychasthenia, the conditioned reflex is established more slowly than in normals. In schizophrenia, the reflex activity is inflexible and dissociation between the two signal systems is frequently complete. In psychasthenia, the second signal system overshadows the first and the basic processes of excitation and inhibition are weak and labile. Russian summary.—C. T. Bever.

4407. Spotnitz, Hyman. The borderline schizophrenic in group psychotherapy: The importance of individualization. *Int. J. group Psychother.*, 1957, 7, 155-174.—"For a patient who cannot face a therapist alone without undue anxiety, the group setting dilutes the threat of the therapist's presence, thus making possible the development of a milder transference." Because of this and other factors, analytic group psychotherapy is recommended for use in the treatment of borderline schizophrenia.—D. D. Raylesberg.

4408. Staudt, Virginia M., & Zubin, Joseph. A biometric evaluation of the somatotherapies in schizophrenia. *Psychol. Bull.*, 1957, 54, 171-196.—"The purpose of this study is to examine the available and analyzable data on the outcome of the shock therapies and psychosurgery in order to get an estimate of the effectiveness of these therapies in the treatment of schizophrenia, as it has been reported in the literature." In spite of the several limitations of these studies the following facts were revealed: in terms of immediate outcome, there is a distinct advantage for the treated groups vs. the untreated ones; in terms of long-range recovery the treated have generally not shown greater improvement over the untreated; specific therapies work better with patients whose illness is of short duration; and with better

prognostic indicators the results of specific therapies would excel the outcome of the nonspecific therapies. 85-item bibliography.—W. J. Meyer.

4409. Takahashi, Yasuo. **Amine oxidase activity of liver tissues obtained by needle biopsy together with other liver function tests on schizophrenic patients. A preliminary report.** *Folia psychiat. neur. jap.*, 1956, 10, 263-278.—Liver tissue was obtained by needle biopsy from 25 hospitalized schizophrenic patients and 14 controls—also psychiatric inpatients with various diagnosis. The author concludes that the amine oxidase of the liver tissue of schizophrenics gave higher values than that of the non-schizophrenic controls. The former also showed a wider range of values. High values were given consistently by hebephrenic patients and those with long duration of illness; both high and low values were given by paranoid schizophrenics, while a few catatonic patients gave values lower than the control group. There was no correlation between amine oxidase values and the results of other liver function tests. 31 references.—M. L. Simmel.

4410. Tec, Leon. **Vicissitudes in guidance of parents of schizophrenic children.** *J. nerv. ment. Dis.*, 1956, 124, 233-238.—A group of 6 selected couples, parents of schizophrenic children, were separated into 2 groups, fathers and mothers, for the purpose of providing an opportunity for discussion of problems commonly shared by all. Reactions of these parents are discussed during their six-months of meeting on alternate Saturdays. Insights into the nature of childhood schizophrenia are offered. 20 references.—N. H. Pronko.

4411. Tolentino, Isidoro, & D'Avossa, Bruno. **Psicosis da amine simpatico-mimetice.** (Psychoses associated with amphetamine.) *Arch. Psicol. Neur. Psich.*, 1957, 18, 127-169.—Psychological and neurological effects of the methedrine-like drugs are described. The authors discuss use of the drugs in therapy, the problem of addiction, and the classification and clinical description of psychoses due to the drugs. The drugs are believed to operate primarily as intensifiers of paranoid tendencies. English, French and German summaries.—E. Rosen.

4412. Tomblen, Donald. **Anxiety and conceptual impairment in schizophrenia.** *Dissertation Abstr.*, 1957, 17, 1600-1601.—Abstract.

4413. Tong, John E. **The assessment of anxiety as an intervening variable in the delinquent behaviour of M.D. subjects. Galvanic skin response and leg-persistence indices.** *Brit. J. Psychol.*, 1957, 48, 13-25.—"Anxiety is accepted as a stimulus-producing response or learnable drive to which certain delinquent behavior is conditioned by drive reduction, and the relationship between fear, anxiety and pain resistance is discussed. The leg-persistence test is regarded as a pain resistance test and is shown to be correlated with galvanic skin response fear reactivity. Persistence scores are shown to vary amongst delinquents according to the hypothetical degree of stress engendered by their previous misbehavior and current hospital confinement. High anxiety (low persistence) subjects are found to be more unstable than others; age and intelligence to have no bearing upon the scores, but psychotic involvement to alter the distributions markedly." 49 references.—L. E. Thune.

4414. v. Baeyer, W. **Zum paranoiden Umschlag cyclothymischer Depressionen in der Krampfbehandlung.** (On paranoid transformation of cyclothymic depressions during convulsive treatment.) *Nervenarzt*, 1957, 28, 100-103.—The case of a 64-year-old woman who has suffered from typical "cyclothymic" depressions since her menopause at the age of 48. On her third admission she became markedly paranoid following her first three electro-shock-treatments. EST was continued and the patient made a complete recovery both from her depression and her paranoid state within a month. The author offers a "nosological interpretation" of the phenomena.—M. Kaelbling.

4415. Wanger, Jack C. **Factors contributing to positive social interaction in groups of schizophrenics.** *Dissertation Abstr.*, 1957, 17, 1601-1602.—Abstract.

4416. Whittier, J. R., & Williams, D. **The co-incidence and constancy of mortality figures for aged psychotic patients admitted to state hospitals.** *J. nerv. ment. Dis.*, 1956, 124, 618-620.—An analysis of hospital records shows that for psychotic individuals aged 60 years and over, 1 in 5 will be dead 30 days after admission to a State hospital, that 1 in 2 will be dead within a year, that these figures may have national validity and that they have been constant for at least the last 30 years.—N. H. Pronko.

4417. Wolf, Alvin. **Stability of test performance of schizophrenic patients.** *Dissertation Abstr.*, 1957, 17, 1603-1604.—Abstract.

(See also Abstracts 3757, 4149, 4168, 4172, 4179, 4200, 4226, 4294, 4298, 4301, 4308, 4309, 4462)

PSYCHONEUROSES

4418. Capell, Martin Donald. **Transference in the ratings of photographs by normals and neurotics.** *Dissertation Abstr.*, 1957, 17, 1809-1810.—Abstract.

4419. Fricke, Benno G. **Conversion hysterics and the MMPI.** *J. clin. Psychol.*, 1956, 12, 322-326.—The MMPI records of 53 hospitalized female conversion hysterics were analyzed. Hy was their highest score but Hs was almost equally high. Although the author's B scale and K weight reduced the correlation between these two scales, it still remained highly positive.—L. B. Heathers.

4420. Lucotte, —. **Deux essais sur la névrose familiale.** (Two essays about the familial neurosis.) *Psyché, Paris*, 1956, 11, 163-192.—The first part of a psychoanalytical oriented consideration on familial neurosis.—M. Knobel.

4421. Noshchenko, G. V. **Opyt napravlenno go vozdeistviia vnusheniem v gipnoze na funktsional'nye vzaimootnosheniia pervoi i vtoroi signal'nykh sistem pri isterii.** (An attempt at directive influence, by suggestion in hypnosis, on the functional interrelations between the first and second signal systems in cases of hysteria.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 672-679.—2 conditions were induced in hysterics: one in which the activity of the first signal system predominated; another in which that of the second predominated. It is concluded from the experiment, that the "definite influence of certain words and sentences in hypnosis on the functional in-

terrelations between the signal systems may be used in psychotherapy" with profit.—*I. D. London.*

4422. Schultz, J. H. *Die Sinn-Bild-Betrachtung in der Neurosenlehre.* (Sensible-image-observation in understanding neuroses.) *Jb. Psychol. Psychother.*, 1956, 4, 222-229.—In neurosis the more differentiated forms of response have been supplanted by primitive forms of organismic response. These also form physiognomically expressive images that yield a wealth of meaning to the sensitive observer. These reactions are more primitive than those which form the principal subject matter of psychoanalysis. The value of hypnotherapy for treating those disorders of this primitive level unamenable to psychoanalysis is receiving increasing recognition.—*E. W. Eng.*

4423. Tausend, Helen. *Psychoanalysis of a case of agoraphobia.* *Samikša*, 1956, 10, 175-200.—In agoraphobia the repressed incessantly returned in the defense mechanism itself. The patient displaced incestuous desires from father to strangers. Then, to protect herself against strangers, father had to accompany her. With resolution of oedipal and pre-oedipal conflicts, the patient showed improvement.—*D. Prager.*

4424. Thorpe, J. G., & James, D. P. *Neuroticism in children: I. An investigation of normal and neurotic group differences.* *Brit. J. Psychol.*, 1957, 48, 26-34.—"Three groups of children aged 11-15 years, equated on sex, age, and intelligence, were given a battery of neuroticism questionnaires and objective performance tests. The experiment was designed to throw light on the effects of the testing situation upon test scores. The results indicate that all the tests, questionnaire or objective performance alike, are to some extent affected by the testing situation, the questionnaires being so much affected as to be virtually useless in discriminating between normal and neurotic groups when the testing situation is more strictly controlled."—*L. E. Thune.*

4425. Wolpe, Joseph. *Psychotherapy by reciprocal inhibition.* Stanford: Stanford Univ. Press, 1958. xiv, 239 p. \$5.00.—By applying known laws of learning to the special problems of neurosis, a method of therapy is evolved which results in a ratio of "apparently cured" and "much improved" patients that is consistently in the region of 90%. Fundamental psychotherapeutic effects follow reciprocal inhibition of neurotic responses, this inhibition resulting directly from the substitution of assertive, relaxation, sexual, etc., responses for the previous neurotic responses. Specific techniques for forming new and antagonistic habits in the stimulus situation which formerly aroused neurotic habits are presented. 11-page bibliography.—*L. N. Solomon.*

4426. Zapadniuk, V. I. *Lechenie eksperimental'nykh neurozov vnutrivennym vvedeniem piramidona.* (Treatment of experimental neuroses through intravenous injection of pyramidon.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 442-446.—The action of pyramidon (injected intravenously, from 15 to 40 mg per kg of weight) on the course of the basic cortical processes in cases of experimental neuroses was studied by means of conditioned reflexes. Analysis of the data obtained on 3 dogs showed that intravenous injection of pyramidon is a "rather effective method of treating functional disturbances of higher nervous activity."—*I. D. London.*

4427. Zverev, A. T. *K mekhanizmu nekotorykh eksperimental'nykh neurozov u sobak.* (On the mechanism of some experimental neuroses in dogs.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 434-441.—By acting upon the "weaker sides of higher nervous activity," experimental neuroses of 2 kinds were brought on in 5 dogs of various nervous types with an elaborated system of conditioned alimentary reflexes. Neuroses of the first kind were characterized by a reduction in the magnitude of conditioned reflexes by 12-80%, in the persistent presence of "hypnotic phases," in the explosiveness and rapid exhaustion of the excitatory process and in a 25-100% increase in the respiratory rate during the experiment. Neuroses of the second kind were characterized by refusal of food, during the experiments, considerable diminution or complete disappearance of conditioned secretion, the presence of hypnotic phases, an "eight to twenty-fold increase in the respiratory rate during experiments, a stable orienting reaction in response to conditioned stimuli, and a considerable intensification of muscular tone." Whereas neuroses of the first kind were completely cured following a three-day induced sleep, it was impossible to cure neuroses of the second kind with repeated administration of different kinds of sleep therapy.—*I. D. London.*

(See also Abstracts 3840, 4194, 4294, 4301, 4308)

PSYCHOSOMATICS

4428. Barendregt, J. T. *Psychologisch onderzoek van effect van groepstherapie bij astmapatienten.* (Psychological investigation of the effect of group therapy in asthma patients.) *Ned. Tijdschr. Psychol.*, 1957, 12, 57-67.—In an attempt to study experimentally the effect of psychotherapy, the latter was defined in terms of objectively scorable Rorschach-categories, in which certain differences between protocols before and after therapy could be predicted. A comparison between the findings in a therapy-group and in a group of matched controls seems to support the hypothesis of the existence of effect of psychotherapy.—*R. H. Houwink.*

4429. Brouwer, D. *Somatotypes and psychosomatic diseases.* *J. psychosom. Res.*, 1957, 2, 23-34.—Anthroposcopic study of 338 men and 243 women, including healthy individuals and patients with physical ailments, failed to reveal clearcut evidence for the existence of "ulcer types," "gall-bladder types," and similar expressions. Syndromes studied included: bronchial asthma, cholelithiasis, and peptic ulcer. "In all groups sex differences were most striking, expressing itself both in mean somatotype and somatotype distribution. It follows that one has to be very cautious when judging the results of somatotypological research, if no separation has been made between both sexes."—*L. A. Pennington.*

4430. Bruch, Hilde. *The emotional significance of the preferred weight.* *Amer. J. clin. Nutr.*, 1957, 5, 192-196.—The author regards weight, together with gait or the manner of speaking, as something individuals use in their own preferred way. She believes it erroneous to assume that overweight is always an abnormal and harmful condition which should or could be removed by dietary restrictions. For many people weight is an important factor in their adaptation to life and may serve as a protection

against more serious maladjustment and illness. Assessment of the psychological factors that have contributed to the development and maintenance of the excess weight is of greatest importance and should be made before initiating alterations in the weight pattern of an individual.—*J. Brožek.*

4431. Crane, George E. Further studies on iproniazid phosphate. *J. nerv. ment. Dis.*, 1956, 124, 322-331.—An anti-tuberculous drug, iproniazid, was administered to 20 debilitated tuberculous patients for the purpose of improving both their depressed physical and mental condition. "Of the 20 patients treated with iproniazid, 12 showed the desired response to the drug and gained an average of 20 lb. Of the 12, 4 exhibited no untoward psychic manifestations after several months of treatment, 6 became behavior problems but could tolerate the drug for many months, and 2 developed mental disorders which required immediate termination of treatment. None developed lasting psychoses." 27 references.—*N. H. Pronko.*

4432. Dongier, Maurice. Quelques acquisitions récentes en pathologie psycho-somatique thyroïdienne. (Some recent findings in psychosomatic thyroid pathology.) *Evolut. psychiat.*, 1956, 2, 405-429.—Psychosomatic aspects of thyroid functioning are outlined, including a review of experiments concerning background factors, personality characteristics, and therapeutic techniques. One conclusion is that there has been a notable lacuna of rigorously controlled research. Recently, however, a unique approach has yielded promising perspectives. This technique involves administering a tracer dose of radioactive iodine No. 131. Later, a Geiger counter reveals the amount utilized by the thyroid. Moreover, a blood count reveals the amount of radioactivity, which is considered an index of hormone secretion. One experimenter, using 71 Ss was able to predict significantly the amount of thyroid utilization on the basis of personality categories revealed through projective tests. 41-item bibliography.—*L. A. Östlund.*

4433. Geist, Harold. Emotional aspects of dermatitis. *J. clin. exp. Psychopath.*, 1957, 18, 87-93.—Psychopathology of varying types has been found in patients with acne vulgaris, atopic dermatitis, eczema of hand, psoriasis, and cellulitis. The most severe psychopathology was found in patients with psoriasis. French and Spanish summaries.—*S. Kavruck.*

4434. Gianakon, Harry G. Psychiatric aspects of pain. *J. Lancet*, 1957, 77, 252-256.—Pain is like a disaster, and its impact can be minimized by explaining what to expect, to allay fear quickly before it can grow, to accept the reality of the pain as real, and when necessary, the person should be sent where more intensive help can be given.—*G. K. Morlan.*

4435. Häfner, H., & Freyberger, H. Psychosomatische Zusammenhänge bei Hautallergosen. (Psychosomatic relationships in skin-allergy.) *Z. Psycho-som. Med.*, 1956, 2, 177-184.—Case studies are given, the patients have certain traits in common, and problems in handling aggression and personal contacts.—*E. Katz.*

4436. Kaplan, Harold I., & Kaplan, Helen S. An historical survey of psychosomatic medicine. *J. nerv. ment. Dis.*, 1956, 124, 546-568.—The history of psychosomatic medicine is discussed from primitive to contemporary times with stress on the neglect of

psychological factors from the Grecian period until the reawakening of interest in the relationship between emotional problems and physical disease associated with the growth of the psychoanalytic movement. "The presentday theoretical approaches to psychosomatic medicine are discussed, compared and evaluated, and the possible future application of these concepts in medical practice is suggested." 81 references.—*N. H. Pronko.*

4437. Krichhauff, Gisela. Bemerkungen zu genetischen und neurosenstrukturellen Faktoren bei endogenen Ekzemen. (Observations of genetic and neurotic structural factors in endogenous eczemas.) *Z. psycho-som. Med.*, 1956, 2, 184-192.—The psychological processes which the author found in patients with eczemas are analyzed.—*E. Katz.*

4438. Leshan, Lawrence, & Worthington, Richard E. Some recurrent life history patterns observed in patients with malignant disease. *J. nerv. ment. Dis.*, 1956, 124, 460-465.—The personalities of a series of 250 patients with malignant disease were evaluated by means of a projective test, the Worthington Personal History, and compared with an age-equated group of 150 individuals with no known disease. Differences in the psychological patterns of the 2 groups are summarized.—*N. H. Pronko.*

4439. Lesse, Stanley. Atypical facial pain syndromes of psychogenic origin: Complications of their misdiagnosis. *J. nerv. ment. Dis.*, 1956, 124, 346-351.—A series of 18 patients seen over a 5-year period is discussed from the standpoint of a mistaken diagnosis and treatment of atypical facial pain syndromes. It is recommended that such patients be investigated by interdisciplinary teams.—*N. H. Pronko.*

4440. Lewis, William C., Calden, George; Thurston, John R., & Gilson, Warren E. Psychiatric and neurological reactions to cycloserine in the treatment of tuberculosis. *Dis. Chest*, 1957, 32, 172-182.—Half of 30 TB patients placed on cycloserine treatment showed varying degrees of psychiatric or neurologic change. 3 had a grand mal convulsion and three others manifested borderline or outright psychosis. Psychological tests on patients not showing obvious psychiatric symptoms revealed no significant changes. With one exception, EEG's on all patients remained normal over a four-month period. Typical cases and data on blood cycloserine levels are presented. It is recommended that "cycloserine treatment of psychiatrically disturbed persons should be undertaken with considerable caution."—*B. M. Stewart.*

4441. Macmillan, M. B. A note on Leshan and Worthington's "Personality as a factor in the pathogenesis of cancer." *Brit. J. med. Psychol.*, 1957, 30, 41.—Reviewing certain Russian studies, the author argues that the four factors found by Leshan and Worthington should be interpreted as "situations which overstrain the nervous processes and allow for the development of a precancerous condition."—*C. L. Winder.*

4442. Mikhalova, TS. Lechenie bronkhial'noi astmy i nekotorykh drugikh zabolevanii periodicheskoi smenoj tormozheniia i stimulirovaniia tsentral'noi nervnoi sistemy. (Treatment of bronchial asthma and of several other diseases by alternating inhibition and stimulation of the central nervous system.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 550-554.—

In order to establish requisite depth of sleep to treat bronchial asthma, it is necessary to create a "strong concentration of the inhibitory process" in the cortex and in those subcortical regions "controlling the relationships between the body and environment." This probably activates by induction those autonomic centers which regulate during sleep the trophic processes promoting the anabolic activities of the organism. Sleep therapy is suggested which alternates with stimulation of: (1) the cortex by means of a bromide-caffeine mixture; and (2) the subcortical regions by means of either androgenous and estrogenous hormones or insulin hypoglycemic states.—*I. D. London.*

4443. Miller, Hyman, & Baruch, Dorothy W. The emotional problems of childhood and their relation to asthma. *A.M.A. J. Dis. Child.*, 1957, 93, 242-245.—A group of 201 allergic children were compared with 110 non-allergic children who served as controls in the study. Parents and older children were interviewed. Younger children were studied by doll-play sessions, "draw your family" techniques and other tests. 97% of the mothers of the allergic children expressed rejection of their child; 37% of the mothers of the non-allergic children.—*G. K. Morlan.*

4444. Neiberg, Norman A. The effects of induced stress on the management of hostility in essential hypertension. *Dissertation Abstr.*, 1957, 17, 1597.—Abstract.

4445. Quarti, C., Renaud, J., & Debray, Ch. Étude des répercussions intestinales de l'émotion par la sigmoidographie. (Sigmoidographic study of intestinal reactions to emotion.) *J. psychosom. Res.*, 1957, 2, 1-22.—Sigmoidographic recordings from a normal personality with a trait disturbance and from a neurotic patient, both studied under varied types of external stimulation, indicated that the intestine reacted differently to emotion-inducing situations in the normal and the neurotic cases. These differential reactions were capable of classification in relation to the nature of the stimulation and organic involvements. The results are discussed in relation to psychosomatic therapies. English summary.—*L. A. Pennington.*

4446. Priest, W. S., Zahs, M. S., Yacorzynski, G. K., & Boshes, Benjamin. The neurologic psychiatric and psychologic aspects of cardiac surgery. *Medical Clinics of North America*, 1957, Jan., 155-169.—Reports results of a 2½ year study (N = 60) of patients exposed to cardiac surgery, with follow-up evaluations at three week, six month, one year and two year intervals post-operatively. Results are related to practical considerations in the care and handling of such patients, urging careful differential diagnosis of the degree of severity of emotional disturbance. "Attention to the psychology of the patient during the first post-operative year is an important part of the rehabilitation program."—*L. D. Summers.*

4447. Reznikoff, Marvin, & Martin, David E. The influence of stress on mammary cancer in mice. *J. psychosom. Res.*, 1957, 2, 56-60.—2 groups of genetically identical mice were studied. Animals in 1 group, however, carried the milk factor (mammary tumour inciter), while it was absent in the second group. One-half of the animals in each of the 2 groups were stressed by administering daily intermittent electric shocks to them for periods ranging

from about 6 months to well over a year. The remaining mice served as controls. Results indicated that the Ss lacking the milk factor did not develop tumors "even when exposed to intensive stress." "More than three-quarters of the stressed animals with a susceptibility and a comparable number of their non-stressed controls developed mammary cancers. . . . It is cautioned that these findings are preliminary and require confirmation."—*L. A. Pennington.*

4448. Sines, Jacob Oliver. An experimental test of two alternative hypotheses concerning peptic ulcer etiology. *Dissertation Abstr.*, 1957, 17, 1599-1600.—Abstract.

4449. Stern, Erich. Psychosomatische Medizin und Hauterkrankungen. (Psychosomatic medicine and skin diseases.) *Z. Psycho-som. Med.*, 1956, 2, 161-177.—Cases treated in the Hopital Broca, and Hopital Saint-Louis in Paris, as well as an extensive survey of the literature in this field do show importance of childhood experiences. No specific personality types were found to be common to the diseases, nor specific conflicts. 54-item bibliography.—*E. Katz.*

4450. Suczek, Robert F. The personality of obese women. *Amer. J. clin. Nutr.*, 1957, 5, 197-202.—The study is focused on 2 major questions: (1) Do obese individuals have common psychological characteristics? (2) Are there some psychological differences associated with the degree of obesity or the ability to reduce? Empirical evidence suggests a positive answer to both questions. The obese women were characterized by emphasis on psychological strength, hypernormality, narcissistic pride, a denial of weakness, and barren quality of TAT stories. Marked obesity tends to be associated with high interpersonal strength (dominance), awareness of internal psychological stress, and subjective distress. A weight loss potential may be predicted most effectively by considering combinations of variables (physical, personal, intrapsychic, and social).—*J. Brožek.*

4451. Sulimovskaia, N. A. K kharakteristike zrachkovogo komponenta orientirovochnoi reaktsii u somaticheskikh bol'nykh. (On the characteristics of the pupillary component of the orienting reaction in somatic patients.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 354-358.—The study of the pupillary component of the orienting reaction makes it possible to detect in somatic patients considerable functional shifts in the activity of the central nervous system, expressed in the predominance of inhibitory or excitatory processes. Thus, the absence of pupillary reactions observed in somatic patients, particularly those affected with cardiac insufficiency or Botkin's disease, are probably due to a heightened excitability of the cerebral cortex.—*I. D. London.*

4452. Summers, Linden D., Jr. Goal-setting as a problem in the psychodynamics of obesity. *Dissertation Abstr.*, 1957, 17, 1817.—Abstract.

4453. van der Horst, L. Diagnostics and psychotherapy of psychosomatic diseases. *J. clin. exp. Psychopath.*, 1957, 18, 61-69.—It is believed that only by a psychosomatic approach that one can try to gain an understanding of the etiology of human sufferings. French and Spanish summaries.—*S. Kavruck.*

4454. Vidal, Guillermo; Bur, Grato E., & Pasqualini, Rodolfo Q. *Psicopatología del síndrome de Klinefelter*. (Psychopathology of Klinefelter's syndrome.) *Acta neuropsiquiat. Argent.*, 1956, 2, 260-270.—Complete medical and psychological examinations of 31 cases of Klinefelter's syndrome revealed the following 4 "traits" which permit a clear diagnosis between the syndrome and other forms of testicular deficiency: (1) normal, well oriented libido; (2) moderate oligophrenia; (3) good social adjustment; and (4) patients usually last or next-to-last member of a family characterized by poor intellectual development. English summary. 17 references.—L. e. G. Datta.

4455. Wilde, G. J. S., & Barendregt, J. T. Toetsing van de hypothesen der psychosomatische specificiteit met behulp van de Vier-Platen-Test van Van Lennep. (A test of the hypothesis of psychosomatic specificity with the Four Picture Test of Van Lennep.) *Ned. Tijdschr. Psychol.*, 1957, 12, 38-48.—A study of 135 Four Picture Test variables in protocols of asthma and ulcer patients showed, that in the former group the hero of the Four Picture story is more often negative or indifferent, and in the latter group more often positive and/or dependent with regard to authority. This finding was found to be valid in cross-validation. Results with other variables appeared to be due to chance factors.—R. H. Houwink.

4456. Young, Charlotte M., Berresford, Kathleen, & Moore, Norman S. Psychologic factors in weight control. *Amer. J. clin. Nutr.*, 1957, 5, 188-191.—Obesity may be associated with states of emotional adjustment varying from essentially normal to seriously disturbed, with no unique personality pattern being evident. Emotional adjustment, in turn, shows a significant positive relationship with dieting performance. Ninety obese clinic patients were studied. Among those with "above average" emotional adjustment scores on Bell Adjustment Inventory, 16 were successful, 13 had some success, and 2 were unsuccessful in reducing weight; among those with "below average" emotional adjustment scores the respective frequencies were: 1 successful, 7 with some success, and 14 unsuccessful. The author calls for increased cooperation between social and biological scientists in dealing with problems of adequate nutrition.—J. Brožek.

(See also Abstracts 3593, 4173, 4308, 4326)

CLINICAL NEUROLOGY

4457. Aaronson, Bernard S. The recurrence of seizures in time. *J. nerv. ment. Dis.*, 1956, 124, 500-503.—Seizure records at the Indiana Village for Epileptics were analyzed to determine the distribution of recurrences of successive seizures in time. It was found that they tend to cluster. The data are interpreted in terms of a probabilistic spread of excitation from a group of hyperirritable cells that constitute a seizure focus. Implications for management of epileptic patients are discussed.—N. H. Pronko.

4458. Aida, Seiichi. Experimental research on the function of the amygdaloid nuclei in psychomotor epilepsy. *Folia psychiat. neur. jap.*, 1956, 10, 181-207.—Part I: Strychnine neurography in 25 adult cats revealed the following: local strychninization of the amygdaloid nuclei demonstrated amygdalo-

temporal, amygdalo-hippocampal, amygdalo-septal, amygdalo-hypothalamic and amygdalo-thalamic projections. Strychninization of lobus temporals resulted in strychnine spikes from hippocampus, amygdala and ventromedial nucleus of the hypothalamus. Part II: A small amount of alumina cream was injected into the left amygdala of 12 adult dogs. Complex autonomic, somatomotor and behavioral paroxysmal disturbances were observed beginning 5 weeks after the injection. EEG studies revealed spikes or sharp waves originating in the injected temporal portion. According to the author this picture resembles psychomotor epilepsy in man. 66 references.—M. L. Simmel.

4459. Alekseev, A. E., & Shishulina, G. P. Dannye o sostoianii korkovykh protsessov u detei, perenesshikh poliomieliit. (Data on the state of cortical processes in children after poliomyelitis.) *Zh. vyssh. nervn. Deiatel.*, 1957, 7, 381-388.—The higher nervous activity of poliomyelitic children was studied by means of verbally reinforced motor reactions. In most children, displaying residual phenomena of poliomyelitis, normal relations between the excitatory and inhibitory processes in the cerebral hemispheres were disturbed with weakness of the excitatory and predominance of the inhibitory processes. "Tendinous-muscular plastics brought about the restoration of the functions of transplanted muscles sooner in children belonging to the excitable group with preserved normal power relations than in those exhibiting phase conditions and predominance of the inhibitory process."—I. D. London.

4460. Alpers, Bernard J. Vertigo and dizziness. New York: Grune & Stratton, 1958. vii, 120 p.—A medical monograph presenting the problems of vertigo "in a practical fashion." The anatomic basis of vertigo is considered and the functions of the Labyrinth and associated connections and vestibular system are described. Causes of vertigo are divided into four general groups: "(1) ocular, (2) aural, (3) systemic, and (4) neurologic" with detailed discussion being given to each causal area. Concluding sections deal with the diagnosis and treatment of vertigo. "There can be little doubt that . . . (the symptoms of) vertigo . . . cut across all fields of medicine."—B. H. Light.

4461. Arnaud, Sara Hayes. Children of multiple sclerotics: Their psychological characteristics. *Dissertation Abstr.*, 1957, 17, 1809.—Abstract.

4462. Austarheim, Kristen. Psychotic reactions caused by cerebral tumors: Report of two craniopharyngiomas. *J. clin. exp. Psychopath.*, 1957, 18, 70-78.—Evidence on 2 cases seems to support the causal relationship between brain tumor and a clinical picture. French and Spanish summaries. 30-item bibliography.—S. Kavruck.

4463. Ayres, A. Jean. A study of the manual dexterity and workshop wages of thirty-nine cerebral palsied trainees. *Amer. J. phys. Med.*, 1957, 36, 6-10.—Subjects were tested with the GATB parts 9, 10, 11 and 12 of the California State Employment Service. Comparison was made with hourly wages. "It is obvious that the manual dexterity performance placed most of these trainees outside the norms. . . . Figures seem to indicate that many individuals [below] . . . percentile rank 0.01 are capable of earning

... \$60 per hour in industrial production."—F. A. Whitehouse.

4464. Blackburn, Harold Lawrence. Effects of motivating instructions on reaction time in cerebral disease. *Dissertation Abstr.*, 1957, 17, 2061.—Abstract.

4465. Dailey, Charles A. Psychologic findings five years after head injury. *J. clin. Psychol.*, 1956, 12, 349-353.—To determine if the presence of pathological tissue in the brain impairs functioning more than does the absence of tissue, a battery of psychological tests was given 2 groups of male veteran patients. In 13 Ss scar tissue had been removed; in 18, it remained. In the latter group seizures were medically controllable and either no epileptogenic focus was located or its site was not operable. On all tests the operated group did better than the non-operated group but no differences were significant. The r between educational level attained prior to the injury and some kind of total estimate of current psychological status was significantly positive for the operated, insignificant for the non-operated. It was concluded that the findings of the study supported "the views of the equipotential theory criticism of experimental, specific-excision studies."—L. B. Heathers.

4466. Daly, David D., & Yoss, Robert E. Electroencephalogram in narcolepsy. *EEG clin. Neurophysiol.*, 1957, 9, 109-120.—Basal or alert EEGs of 100 narcoleptic patients were found to be normal. Drowsiness beginning within the first 4 minutes of the record occurred in the majority of patients. Almost all patients became drowsy at some time during the recording. Sustained drowsiness was a characteristic of these patients, but actual sleep was uncommon in the EEG situation. EEGs during cataplectic and sleep paralysis attacks were normal.—R. J. Ellingson.

4467. Halpern, Seymour. The significance of critical flicker-fusion thresholds in cerebral palsied children. *Dissertation Abstr.*, 1957, 17, 1607.—Abstract.

4468. Hecean, H., & de Ajuriaguerra, J. Le problème de la dominance hémisphérique. Les troubles du langage desgnosies et des praxies chez les gauchers lors des lésions hémisphériques droites et gauches. (The problem of cerebral dominance: Disturbances of language, gnosis and praxis in left-handed patients with lesions in the right and the left hemispheres.) *J. Psychol. norm. path.*, 1956, 53, 473-486.—The literature concerning the symptomatology arising after right and left hemisphere lesion in right and left handed patients is reviewed systematically. The authors then present findings on 21 left-handed patients, 14 of whom had left-sided lesions and 7 right-sided lesions. In actual fact all types of aphasic, apractic, and agnostic disturbances which have been described in right-handed patients occur also in left-handed patients with postrolandic lesion of either side, and these disturbances occur in different combinations in individual patients. It appears, however, that the disturbances are somewhat less severe than in right-handers, and are often only transitory, or paroxysmal. The authors conclude that in left-handers cerebral dominance is less firmly established and that there is relatively greater cortical equipotentiality in such individuals. 20 references.—M. L. Simmel.

4469. Irwin, Orvis C. Word equipment of spastic and athetoid children. *Cerebral Palsy Rev.*, 1957, 18, 13-14.—The recorded speech samples of 128 spastics, 86 athetoids, and 52 tension athetoids, located in 8 geographically diverse states, were analyzed for the frequencies of occurrence of correctly spoken words and of work approximations. While there were evidences of the presence of an age factor, there appeared "to be no statistical evidence for the hypothesis that differences exist in the speech of spastics, athetoids and tension athetoids."—T. E. Newland.

4470. Jordan, Thomas E. Psychological findings in a case of Von Recklinghausen's disease and hyperpituitarism. *J. clin. Psychol.*, 1956, 12, 389-391.—"The psychological characteristics of a boy diagnosed as having Von Recklinghausen's disease and hyperpituitarism were presented."—L. B. Heathers.

4471. Knehr, C. A., & Bearn, A. G. Psychological impairment in Wilson's disease. *J. nerv. ment. Dis.*, 1956, 124, 251-255.—A group of 7 patients with Wilson's disease was studied as to the nature and extent of the psychological impairment involved. Results showed loss in capacity for conceptual thinking, lowered flicker frequency threshold and prolonged after-image time. Possible use of psychological tests in detecting cryptic neurological components in patients with Wilson's disease is discussed.—N. H. Pronko.

4472. Kogan, K. L. Repeated psychometric evaluations of preschool children with cerebral palsy. *Pediatrics*, 1957, 19, 619-621.—For research purposes the IQ for children with cerebral palsy may have greater validity than has commonly been supposed.—E. L. Robinson.

4473. Kurosawa, Ryosuke; Hattori, Hisashi, & Wakoh, Toshihisa. The pathogenesis of epileptic seizure. *Folia psychiat. neur. jap.*, 1956, 10, 208-226.—Measurements of serum electrolytes during EEG, before and after hyperventilation revealed the following: When the EEG did not show any abnormality during hyperventilation, or showed the same abnormality before and after hyperventilation, Na increased and K decreased. By contrast, when hyperventilation produced violent discharges, Na decreased and K increased. Two patients under anti-convulsant medication (DCA, AT-10) which resulted in decrease of seizures showed simultaneously decrease of K and increase of N. Results of other tests (e.g., Thorne's test for decrease of eosinophil cells in response to epinephrin; urinary 17-keto steroid output) are discussed. The authors conclude that due to insufficient adrenocortical function the electrolyte metabolism is upset, and reacts by mobilizing the adrenal cortex into a hyperfunctioning which may act occasionally as a precipitating factor for a spontaneous seizure. 19 references.—M. L. Simmel.

4474. Mann, Vera D. A study of the attitudes of mothers of cerebral palsied children toward child adjustment. *Dissertation Abstr.*, 1957, 17, 2078-2079.—Abstract.

4475. Morrell, Frank. Interseizure disturbances in focal epilepsy. *Neurology*, 1956, 6, 327-334.—A comparison of the trials to condition an alpha response to tone and to touch in 9 patients with focal temporal epilepsy showed marked impairment of con-

ditioning to tone. Motor reaction time to tone and to touch was not different for these patients. "The data indicates that the focal epileptogenic lesion selectively impairs the kind of temporary connection involved in the conditioned reflex and does not impair the temporary connection involved in motor reaction time." The author concludes that "impairment in the capacity of damaged cortex to participate in the formation of conditioned reflexes may explain much of the interseizure symptomatology of patients with focal epilepsy."—L. I. O'Kelly.

4476. Olson, Ray Willard. A comparison of mental deterioration and intellectual functioning in senescent and brain-damaged subjects. *Dissertation Abstr.*, 1957, 17, 1813-1814.—Abstract.

4477. Qualtere, Thomas John. An investigation of the relationship between visual figure-background disturbance and performance on Raven's Progressive Matrices Test in cerebral palsy children. *Dissertation Abstr.*, 1957, 17, 1708.—Abstract.

4478. Rettig, Judith H. Chlorpromazine and Mysoline in the control of convulsive epilepsy in mentally deficient patients. *J. nerv. ment. Dis.*, 1956, 124, 607-611.—"A group of mentally deficient, poorly controlled epileptics, 28 of whom also had behavioral reactions, was given Mysoline alone and in combination with chlorpromazine in order to investigate the clinical effects of these drugs upon (a) number of seizures and (b) behavior. It was found that in all cases Mysoline alone was the most effective agent in controlling number of seizures. The combination of chlorpromazine with Mysoline was most effective in improving the behavior of patients." 23 references.—N. H. Pronko.

4479. Shere, Marie Orr. The socio-emotional development of the twin who has cerebral palsy. *Cerebral Palsy Rev.*, 1957, 18, 16-18.—Two two-hour observations of 30 twin pairs in Illinois (aged 18 months to 16 years) were made, using adaptations of the Fels scales on parent and child behavior, an adaptation of the Vineland Social Maturity Scale, and an anecdotal procedure to record behavior observations. Both clinical and statistical analysis of the results suggest no major differences in parent behavior in 15 out of 25 items, although the nonhandicapped twin was expected "to assume more responsibility and to act in a more mature manner than his age or capabilities would warrant." The parents tended to over-protect the twin with cerebral palsy. "On all other items (excepting that of curiosity), the behavior of the child with cerebral palsy was, in general, more desirable than that of his twin." Phelps' characterization of personality types of the cerebral palsied was not supported.—T. E. Newland.

4480. Stephenson, George Rothwell. Form perception, abstract thinking and intelligence test validity in cerebral palsy. *Dissertation Abstr.*, 1957, 17, 1600.—Abstract.

4481. Stunkard, Albert, & Plescia, Alba D. The effect of the intravenous administration of various nutrients on the gastric hunger contractions of a man with severe brain damage. *Amer. J. clin. Nutr.*, 1957, 5, 203-211.—The effects were studied in a young underweight patient, severely injured in an accident and presenting the clinical picture of a "decorticate" man. Following the administration of fat, amino acids, and glucose the hunger contractions

persisted for hours without interruption. Intravenous administration of glucagon, the hyperglycemic-glycogenolytic factor of the pancreas, resulted in increased glucose utilization. Gastric contractions were promptly abolished. The findings are considered as supporting the "glucostatic" (J. Mayer) rather than the "thermostatic" (J. R. Brobeck) theory of food-intake regulation.—J. Brožek.

4482. Walker, Robert G. The revised Hooper Visual Organization Test as a measure of brain damage. *J. clin. Psychol.*, 1956, 12, 387-388.—The Revised Hooper Visual Organization Test was given to 38 VA NP patients who were categorized by the chief neurologist as either definitely showing no cortical involvement or as probably or possibly having some brain damage. The quantitative score of the test did not differentiate these 2 groups. A qualitative score based on the number of concrete responses given did significantly differentiate the groups, but the cut-off-score was so low (more than one concrete suggested brain damage) that the test should be lengthened if used for individual diagnosis.—L. B. Heathers.

4483. Wartenberg, Robert. Neuritis, sensory neuritis, neuralgia. New York: Oxford Univer. Press, 1958. xii, 440 p. \$8.50.—With a detailed review of the literature, this clinical study synthesizes historical and recent developments. De-emphasizing the importance of mechanical factors, evidence is presented to maintain and revise the older view of an inflammatory etiology. The highly complicated structure of the peripheral nerve with its many afferent and efferent conductive systems affords a great variety of paralytic and irritative affections and of consequent clinical manifestations. Neuralgia is understood not as a separate clinical entity, but as the algic form of neuritis. Special emphasis is devoted to migrant sensory neuritis, a new clinical subentity. A 50-item general bibliography is supplemented by special references after each chapter.—C. T. Bever.

4484. Zborovskii, A. B. O vzaimootnoshenii pervoi i vtoroi signal'nykh sistem u bol'nykh revmatizmom. (On the interrelation between the first and second signal systems in cases of rheumatism.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 374-379.—"Elective irradiation" of the excitatory process and of active internal inhibition from the first signal system into the second and vice versa was not recorded in patients suffering from rheumatic polyarthritis in the active phase; its restoration, however, occurred in the remittent phase. Elective irradiation of the excitatory process from the first signal system into the second and vice versa remained in cases of rheumatic heart diseases in the decompensation period. Elective irradiation of inhibition was, however, absent in these cases. In the period of compensation elective irradiation of inhibition was, however, absent in into the second signal system and vice versa was restored.—I. D. London.

(See also Abstracts 3588, 4172, 4179, 4200, 4298)

PHYSICALLY HANDICAPPED

4485. Arnold-Cerancke, Susanne. Gesichtsentstellung und Minderwertigkeitsgefühl. (Facial disfiguration and inferiority complex.) *Z. Psychosom. Med.*, 1956, 2, 193-199.—The psychological con-

siderations are discussed which help to decide whether surgery should be used or not.—E. Katz.

4486. Asenjo, J. A., & Axelrod, S. A survey of vocational objectives of blind college students in the U. S. *New Outlook for the Blind*, 1957, 51, 9-16.—State and territorial agencies for blind persons serving 75% of the population of the U. S. returned questionnaires with information on 493 legally blind college students. Most frequently listed vocational objectives: teaching (30%), social work (12%), law (11%). No essential difference was found between the objectives of graduates of residential schools and of other schools. Data are presented on characteristics of blind public school teachers, on blind and sighted teachers in U. S. residential schools for blind children, and on ordinances bearing on the employment of blind applicants for teaching positions in 88 county superintendencies of education (of 151 polled).—N. J. Raskin.

4487. Avakian, R. V., Gershuni, G. V., & Ratenberg, M. A. Issledovanie funktsii slukhovogo analizatora u bol'no' s iavleniiami istericheskoi glukhoty. (Investigation of the function of the auditory analyzer in a patient with manifestations of hysterical deafness.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 325-334.—In the hysterically deaf patient auditory threshold sensitivity, as determined by skin-galvanic reaction and conditioned eyelid reflexes, was normal. Conditioning was slowed down; "successive and extinctive inhibition" was very marked; no conditioned motor reaction to sound was detected when verbal reinforcement was used. Accompanying first conditioned motor reaction to sound, based on verbal reinforcement, are all the customary signs of hearing restoration. Hysterical deafness is probably to be accounted for by "reversible inhibitory phenomena which block in some way the connections of the auditory analyzer with the complex motor reactions intimately related to the second signal (verbal) system."—I. D. London.

4488. Blank, H. Robert. Psychoanalysis and blindness. *Psychoanal. Quart.*, 1957, 26, 1-24.—"The applications of psychoanalytic principles to the study and treatment of the psychic problems of the blind were presented, and certain implications of this study for the theory of ego development were suggested. Emphasis was laid on the differentiation of congenital blindness as a direct etiologic factor in personality disorders from other causes, particularly the distorted parent-child interactions and the widespread ambivalence toward the blind." 18 references.—L. N. Solomon.

4489. Combs, William Francis. Judgmental performance of the blind as affected by social and physical stimulus conditions. *Dissertation Abstr.*, 1957, 17, 1704-1705.—Abstract.

4490. Farber, Nathan. The child amputee. *J. Ass. phys. ment. Rehab.*, 1957, 11, 56-57.—This report "brings together contemporary thought on psychological aspects of the child amputee from the theoretical and practical points of view."—L. A. Pennington.

4491. Freedman, Alfred M. Mental health needs of physically handicapped children. *Cerebral Palsy Rev.*, 1957, 18, 8-9; 18-19.—The characteristics of a clinic program, with respect to its mental health aspects, are stated—staff, work-up, scope of concern,

and research sensitivity. Emphasis is placed upon the milieu of each child—in the center, in the home, and in other areas such as the community and the school. Specific illustrative material is presented with respect to the syndrome, "familial dysautonomia" involving a lack of autonomic homeostasis caused or aggravated by treatment within the home, or in the clinic-home complex.—T. E. Newland.

4492. Lokshin, Helen. Psychological factors in casework with blind older persons. *J. Jewish communal Serv.*, 1957, 33, 321-327.—A case report on male and female clients 59 to 92 years of age known to the Social Service Department of the New York Guild for the Jewish Blind. None of the 54 discussed had been blind at birth or during early childhood. While some had sudden traumatic experiences terminating in blindness, others had visual loss over a prolonged period and most of them became blind after their sixtieth year. Many problems arise out of blindness which are further aggravated when they occur late in the life of the individual. Personal adjustment and orientation of the members of the family of the blinded individual require casework counseling and psychological help administered promptly and in a manner that will minimize damage to the patient or his intrapersonal family relationships. Careful diagnostic evaluation of the psychological status of these patients should be followed by an appropriate course of medical, social and psychological treatment focussed upon the prevention of avoidable problems and the correction of those which are already present. The highly individual nature of the problems in the older aged blind emphasize the need for attention to each patient's specific problems.—M. A. Seidenfeld.

4493. Maxfield, Kathryn B., & Buchholz, Sandra. A social maturity scale for blind preschool children: A guide to its use. New York: American Foundation for the Blind, 1957. iv, 43 p.—The present scale is a revision of the Maxfield-Fjeld Adaptation of the Vineland Social Maturity Scale for preschool-age blind children. It includes 95 items and covers ages 1-6. Standardization data on 484 children are presented in the form of per cent passing each item at the 6 age levels. A copy of the scale itself and directions for administration are included.—N. J. Raskin.

4494. Rawls, H. D. Social factors in disability. *New Outlook for the Blind*, 1957, 51, 231-236.—"... the disabled child lives in a world of people as well as in a world of natural physical processes. In the family he experiences his first social relationships with his mother, his father, and his brothers and sisters. Their attitudes toward him and toward his disability exert an important influence on his personality; i.e., on his attitudes toward others, his emotional make-up, his aspirations, and his self-conception. The kinds of relationships which are established in his family may be of greater importance than his physical disability. As his contacts extend beyond the family circle into ever widening spheres, certain factors will assume importance in structuring his relationship: i.e., biosocial, residential, and socio-cultural factors. These relationships, in turn, will determine his eventual feeling toward himself (his self-adjustment) and his role in society."—N. J. Raskin.

4495. Roy, Joy Benjamin. A psycho-social study of group interaction of physically handi-

capped and able-bodied children. *Dissertation Abstr.*, 1957, 17, 1815.—Abstract.

4496. Sanua, Victor D., Diller, Leonard; Loomer, Alice, & McCavitt, Martin E. *The vocational rehabilitation problems of disabled Puerto Ricans in New York City*. New York: Institute of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center, 1957. 69 p. \$1.00.—"The vocational rehabilitation problems of disabled Puerto Ricans living on the mainland of the United States were studied through analysis of: (1) interviews with 33 Puerto Rican rehabilitation patients; (2) 222 records of Puerto Ricans and 200 records of a control group of non-Puerto Ricans at the Division of Vocational Rehabilitation; (3) interviews with 38 representatives of agencies having large case loads of Puerto Ricans."—V. M. Staudt.

4497. Shelsky, Irving. *The effect of disability on self-concept*. *Dissertation Abstr.*, 1957, 17, 1598-1599.—Abstract.

4498. Thume, L. *Symbols of blindness*. *New Outlook for the Blind*, 1957, 51, 245-247.—Blindness can be associated with a number of stereotyped objects or behavioral traits. The newly blinded person's reaction to the use of a white cane may reveal symbolically attitudes of dependence or independence. A formalized acceptance is needed of the importance of these symbols that may represent blindness to a particular person.—N. J. Raskin.

4499. West, D. N. *Integration: For whom? How?* *New Outlook for the Blind*, 1957, 51, 253-255.—The theories and methods of the behavioral and social sciences are needed to test prevalent generalizations about "the blind," and to provide more factual data about this population.—N. J. Raskin.

(See also Abstracts 4361, 4554, 4558)

EDUCATIONAL PSYCHOLOGY

4500. Allahabad, U. P. *Bureau of Psychology. The school psychologist*. *Bur. Psychol., Allahabad*, 1956, No. 8, 32 p.—An outline of the duties of school psychologists working at the local level in the State of Uttar Pradesh, India. The most important function is to provide educational guidance for students at the close of Class VIII, where students must choose one of six secondary school curricula. Other duties will involve the organization of remedial classes for backward children as well as enriched programs for the gifted, provision of personal counseling for the emotionally maladjusted plus acting as field worker for research projects initiated by the central bureau in Allahabad. An appendix describes the training program.—W. L. Barnette, Jr.

4501. Allen, Deryle Kenneth. *A study of dropouts from the public secondary schools of Oklahoma City for the year 1954-1955*. *Dissertation Abstr.*, 1957, 17, 1703-1704.—Abstract.

4502. Alon-Bakaliar, Shoshana. *Hashpaat haseviva hahinukhit*. (The influence of the educational environment on the intellectual and emotional development: A comparative study of Yemenite elementary school graduates.) *Hahinukh*, 1956-57, 29, 29-33.—There were 2 aims of this study: (1) To find whether there are differences in patterns of behavior between Yemenite school graduates in Tel

Aviv in 1953 and in 1955 during their secondary school studies; (2) whether there is a difference between Yemenites who learned in homogenous primary school classes and in classes composed of Yemenites and others. (1) The 1955 class is superior to the 1953 group; the explanation lies in bettering of environmental factors. (2) Yemenite children learning in heterogenous classes are superior to Yemenites learning in homogenous Yemenite classes.—H. Ormian.

4503. *American Educational Research Association. Committee on International Relations. Educational research in countries other than the U. S. A.* *Rev. educ. Res.*, 1957, 27, 1-158.—Topics such as educational measurement, educational psychology, educational sociology, guidance and counseling, mental and physical development, language arts, mathematics, and science, research methods, special programs, and teacher personnel for the period 1950-1956 are covered as follows: Australia by W. C. Radford (79 references); New Zealand by George W. Parkyn (83); Canada by Robert W. B. Jackson (74); French-speaking countries: Belgium, France, Switzerland by Fernand A. Hotyat (94); German-speaking countries: Austria, the German Federal Republic, and German-speaking Switzerland by Marcel Müller-Wieland (144); Japan by Daishiro Hidaka and Shunsuke Murakami (204); Latin-American countries: Brazil (106), Costa Rica, Ecuador, and Panama (11), and Puerto Rico (26) by Anisio S. Teixeira, Carlos Monge Alfaro, Ernel N. Velasco, and Ismael Rodriguez Bou; Scandinavian countries: Denmark and Norway (2), and Sweden (30), by Åge Haugland and Karl-Georg Ahlström; and the United Kingdom by E. A. Peel (210).—W. W. Brickman.

4504. Cassel, Russell N. *The psychology of instruction*. Boston: Christopher Publishing House, 1957. 143 p. \$2.25.—Much of the knowledge of effective learning has been confined to areas not generally circulated in the professional channels and literature of the educator, but this knowledge has been utilized more extensively by the clinical psychologist in psychotherapy. In this book the author has sought to identify pertinent material related to the psychology of instruction from both the psychological and educational literature. He has drawn upon the main currents of thought and research in educational, clinical, and social psychology and has summarized "what I believed to be meaningful information essential for the novice and experienced teacher related to principles learning and transfer of training."—R. A. Hagin.

4505. Coladarci, Arthur P. *Educational psychology*. *Annu. Rev. Psychol.*, 1958, 9, 189-212.—Covering the 12-month period ending in April 1957, this review includes a 160-item bibliography.—A. J. Sprow.

4506. Grieger, P. *Facteurs ethnopsychologiques de l'éducation*. (Ethnopsychological factors in education.) *Nouv. Rev. pédag.*, 1957, 12, 460-465.—Social psychology and dynamic psychology have shown that the child cannot be studied in isolation, but that he is understandable only as he functions in his environment. That is why a knowledge of ethnopsychological influences on the mental development of the child is important.—R. Piret.

4507. Onishi, Saichi. *Kyōiku mokuhyō no bun-rui ni kansuru kenkyū*. (A study on the taxonomy of educational objectives.) *Jap. J. educ. Psychol.*, 1956, 3, 176-182.—The present educational objectives are classified into cognitive, affective and motor areas. This report deals with the first two. The cognitive aspect is analyzed into knowledge, intellectual abilities and skills. The affective aspect is analyzed into comprehension, application, analysis, synthesis and evaluation. A further analysis was made on each of these functions. The author concludes that 'the basic taxonomical schema thus constructed is expected to be useful for better understanding and development of education. English summary, p. 188.—S. Ohwaki.

(See also Abstract 4296)

SCHOOL LEARNING

4508. Anderson, Irving H., Hughes, Byron O., & Dixon, W. Robert. The relationship between reading achievement and the method of teaching reading. *Univ. Mich. Sch. Educ. Bull.*, 1956, 7, 104-108.—Subjects are 211 children from the university school and 434 children from a nearby public school. Based on the Gates reading tests, average age of learning to read is 86 month for university school and 81.1 for public school. It is hypothesized that systematic approach to reading employed by the public school enables children to read early and reduces individual variation in age of learning to read, while informal practice pursued by university school delays age of beginning reading and maximizes individual variation. Once the children have learned to read, however, initial delay of university group is gradually overcome. It is concluded difference in method does not have a lasting effect and reading can be taught successfully either way.—S. M. Schoonover.

4509. Baczyńska, Halina. *Analiza błędów w pisaniu w okresie opanowywania techniki pisania*. (Analysis of errors in writing in the period of learning to write.) *Zes. Nauk. Univ. A. Mickiewicza Fil., Psychol., Pedagog.*, 1956, 1, 85-89.—The author analyses various kinds of errors met in the writing of school children but not reckoned among the orthographic errors, and discusses their possible causes. She also outlines some aspects of the planned further investigations.—M. Chojnowski.

4510. Brychcy, Irena. *Psychologiczna analiza procesów kształtowania się nawyków ortograficznych*. (Psychological analysis of the processes of formation of orthographical habits.) *Zes. Nauk. Univ. A. Mickiewicza Fil., Psychol., Pedagog.*, 1956, 1, 90-94.—This is the analysis of a number of empirical observations relating to the regularities in the formation of orthographic habits. The author distinguishes in this process three stages and states that the habit to apply the learned orthographic rule forms much faster at the second rule than at the first, which means that the number of known rules increases the ability to master new rules of spelling.—M. Chojnowski.

4511. Creelman, John A., & Miller, Elmo E. Evaluation of a "moving airplane" attitude indicator. *USN Sch. Aviat. Med. Res. Rep.*, 1956, Proj. No. NM 001 109 107, Rep. No. 3, iii, 9, A-3 p.—Under controlled field conditions the rates of student learning on two types of attitude gyro were com-

pared. These were: (a) an indicator in which the miniature airplane was the moving element; and (b) an indicator in which the artificial horizon moved. The results indicated that there was only one significant difference on measures of student learning. The transition to the standard attitude gyro from the indicator with a small moving airplane was easier than the opposite transition. The small differences that did exist tended to favor the standard attitude gyro.

4512. Diener, Charles L. A comparison of over-achieving and under-achieving students at the University of Arkansas. *Dissertation Abstr.*, 1957, 17, 1692.—Abstract.

4513. Felleman, Carroll Alfred. The relationship between certain personality characteristics and prognosis in remedial reading instruction: An investigation to determine whether certain personality characteristics found in children with reading disabilities can be predictive of progress or lack of progress in individual remedial reading instruction. *Dissertation Abstr.*, 1957, 17, 1594-1595.—Abstract.

4514. Fritz, Martin F., Kentner V. Scholastic probation and size of high schools. *Proc. Iowa Acad. Sci.*, 1956, 63, 610-614.—A study of the relationship between number of freshmen on probation in one quarter at Iowa State College and the size of the high school from which they graduated showed no systematic trends or significant differences.—C. F. Haner.

4515. Heideman, Paul John. A study of the relationship between televiewing and reading abilities of eighth grade students. *Dissertation Abstr.*, 1957, 17, 1935-1936.—Abstract.

4516. Hildreth, Gertrude. New methods for old in teaching phonics. *Elem. Sch. J.*, 1957, 57, 436-441.—In view of the confusion that prevails, parents and teachers should be given more demonstration on how children learn sounding in the context of meaningful words and sentences. New research should be undertaken to evaluate the relative merits of different methods. The author discusses: (1) the shift to analytic methods of sounding; (2) limitations of synthetic sounding; (3) features of the analytic method of sounding; advantages of whole-word sounding and (5) pitfalls in analytic sounding.—S. M. Amatora.

4517. Horn, Ernest. Phonetics and spelling. *Elem. Sch. J.*, 1957, 57, 424-432.—6 types of evidence should be considered in appraising the potential contributions of phonic instruction to spelling: (1) uniformity or the lack of it in pronunciations; (2) the ways in which the various sounds are spelled; (3) investigations of children's attempts to spell the sounds in common words; (4) the influence of word patterns and word relationships; (5) the laws of association and of negative and positive transfer; and (6) the findings of research on teaching generalizations. The author presents an analyses of the first three topics and shows the findings of his own study of common sounds, spellings of certain vowel sounds.—S. M. Amatora.

4518. Kaplan, Arthur Mark. An exploratory study of piano playing behavior in two groups of children. *Dissertation Abstr.*, 1957, 17, 1511.—Abstract.

4519. Komuro, Shohachi. *Jidō no shakai-teki kōdō ni oyobosu gakushū shidōhō no eikyō ni tsuite: II. Kokugo gakushū shidōhō no jikkenteki hikaku kenkyū.* (The influence of learning method upon social behavior of children: An experimental comparison of the effect of learning methods in Japanese.) *Jap. J. educ. Psychol.*, 1956, 3, 157-163.—Teacher-centered and child-centered methods were applied in teaching Japanese to each of 2 homogeneous groups of 4th grade. The same result as the previous study was obtained: In child-centered teaching, friendliness and cooperative attitude developed among children. While child-centered method seemed to be less effective to the children with low intelligence, no significant difference was found in achievement between 2 groups. English summary, p. 185-186.—S. Ohwaki.

4520. Lipton, Aaron, & Feiner, Arthur H. *Group therapy and remedial reading.* *J. educ. Psychol.*, 1956, 47, 330-334.—A group therapy approach to the problem of reading retardation is presented. 9 fourth grade boys, all of average or above average intelligence, met 3 times a week for hourly sessions. The group's development went through various levels of growth, from disorganization to self-directed learning activity. Reading gains, measured by the Smith "Informal Reading Inventory," appeared significant. Social gains, likewise, were marked. The authors discuss the above findings.—S. M. Schoonover.

4521. Manney, Agnes Ann. *The temporal orientation of the retarded reader.* *Dissertation Abstr.*, 1957, 17, 1708.—Abstract.

4522. Parsons, Thomas S. *A comparison of instruction by kinescope, correspondence study, and customary classroom procedures.* *J. educ. Psychol.*, 1957, 48, 27-40.—Kinescope-correspondence study groups without instructor, conventional classroom discussion with instructor, and independent correspondence study were compared for effectiveness at university level. Subjects were 40 upper classmen. Findings: (1) none of 3 methods was significantly more effective than others in producing terminal achievement; (2) amount of group structure, cohesiveness, etc., showed no statistically reliable differences between classroom and kinescope treatments, except that classroom-with-instructor method tended to produce dependable role expectations among members at a faster rate and to a higher degree; (3) students' preferences among instructional methods appeared highly conditioned by their immediate involvements and by their past experiences.—S. M. Schoonover.

4523. Rasmussen, Glen R. *An evaluation of a student-centered and instructor-centered method of conducting a graduate course in education.* *J. educ. Psychol.*, 1956, 47, 449-461.—The effectiveness of student-centered vs. instructor-centered learning situations was investigated. Questionnaires were administered at end of the course, and a test plus questionnaire were administered 6 months after completion of the course. No significant difference was found on the test. At the end of the course, student-centered classes estimated they had learned more, that what they had learned would be more practical, that more attitude change had taken place, and that class had been more interesting. Six months after completion of the course, student-centered classes esti-

mated more behavior change as a result of the course than did instructor-centered classes.—S. M. Schoonover.

4524. Santos de García, Ramonita. *El diagnóstico y la corrección de deficiencias en la lectura en la escuela secundaria.* (The diagnosis and correction of reading deficiencies in the secondary school.) *Pedagogía, Rio Piedras*, 1957, 5(1), 53-63.—The location and remedy of difficulties in reading among high school students are considered, with special reference to modern techniques.—E. Sánchez-Hidalgo.

4525. Siriah, G. D. *An investigation into errors in the use of written Hindi committed by the students of Anglo-Indian schools.* *Educ. & Psychol., Delhi*, 1956, 3(2), 36-44.—An experiment was conducted with pupils from the VII, VIII, IX classes in the Anglo-Indian schools of Nagpur to determine the type of errors made in both written and spoken Hindi. Probable causes for such errors were investigated with the view of suggesting appropriate remedies for language improvement. Results are presented for the 4 communities investigated: the English-speaking; the Hindi-speaking; the Parsee; the South Indians. Analysis of variance within and between groups was used. Differences were significant at the 1% level. F-test showed that variance between the communities was significantly different from that within communities. A number of suggestions for improvement of Hindi are presented.—H. Angelino.

4526. Spache, G. D. *Intellectual and personality characteristics of retarded readers.* *Psychol. Newsletter, N. Y. U.*, 1957, 9, 9-12.—100 retarded readers screened to eliminate those with obvious personality maladjustments were administered the WISC. "Market differences in verbal and non-verbal intelligence were found. Two-thirds of the retarded readers were distinctly poorer in their verbal abilities than the non-verbal."—M. S. Mayzner.

4527. Sparks, Paul Emerson. *An evaluation of two methods of teaching reading.* *Dissertation Abstr.*, 1957, 17, 1712-1713.—Abstract.

4528. Szuman, Stefan. *Rozwój treści słownika dzieci: Zagadnienie i niektóre wyniki badań.* (The development of the content of children's vocabulary: Problem and some research results.) *Studia pedagog.*, 1955, 2, 5-74.—This is a summary of a large research in progress on the development of the content of the vocabulary of children and adolescents. In the first part of a paper the author explains the aim of the research and its theoretical presuppositions, based on Pavlov's theory of higher nervous activity and Stalin's views on the language. In the second part the author presents his method (different manners of checking if the child understands a word in 20 two-year-old children and 2 four-year-old ones) and reviews in detail some of his results relating to the number and content of substantives and verbs. The appendix contains full lists of substantives and verbs found, classified into 26 and 24 categories, respectively.—M. Choynowski.

4529. Tinker, Miles A. *Effects of angular alignment upon readability of print.* *J. educ. Psychol.*, 1956, 47, 358-363.—Changes that occur in reading speed and in word visibility when alignment of printed lines departs from the horizontal were analyzed. Subjects were 300 individually tested college sopho-

mothers; reading material consisted of paragraphs from Chapman-Cook Speed of Reading Test. It was found that when the text was rotated 45° clockwise, speed of reading was retarded 51.4%. When rotated counter-clockwise by same amount, retardation was 53.1%. In reading vertically downward, retardation was 203.4%, while reading vertically upward it was 206.7%. Rotating words 45° in either direction decreased visibility 11 to 12%, while rotating words to a vertical alignment, reduced visibility about 21%. Some causes of the above findings are presented.—S. M. Schoonover.

4530. Voiers, William D. Bombing accuracy as a function of the ground school proficiency structure of the B-29 bomb team. *USAF Person. Train. Res. Cent. Res. Rep.*, 1956, No. 56-4, vii, 24 p.—The results of this study of the bomb teams of 176 B-29 crews in training suggest that the contribution of any team members' proficiency to a complex team product, such as radar bombing score, will depend largely on the proficiencies of other crew members. With proficiency measured as ground school grade and 3 criteria of simulated radar bombing (circular error, range error and deflection error) it was found that aircraft commander and radar observer are directly dependent on one another for effective expression of their relative proficiencies. The navigator's proficiency contributed to bombing accuracy most when both of these crew members were below average. Results for bombardier were less clear.—S. B. Sells.

4531. West, Leonard J. An experimental comparison of nonsense, word, and sentence materials in early typing training. *J. educ. Psychol.*, 1956, 47, 481-489.—Experiment in early typing training was designed to hold constant: (1) rate of introduction of new keys; (2) frequency of appearance of each letter in practice materials; and (3) total amount of practice on each type of material. Subjects were 345 airmen with no previous typing experience. The first 65 minutes of a total of 120 minutes of practice were devoted to differential materials. The last 55 minutes of practice used same materials for all groups. In general, both for sentence and code typing, use of word or sentence materials were found to give learners an initial advantage, both in speed and in fewer error, over those trained on nonsense sequences.—S. M. Schoonover.

4532. Willingham, Warren W. A note on the predictive validity of physical training phase grade. *USN Sch. Aviat. Med. Res. Rep.*, 1957, Proj. No. NM 14 02 11, Sub. 1, Rep. No. 22, ii, 5 p.—The physical fitness and survival grade in pre-flight is currently used as a predictor of future success in flight training. This grade is based on 6 phases of training which differ considerably in content. In this study these phase grades were related to subsequent performance in flight training in an attempt to improve the predictive validity of the pre-flight progress grade. Results indicate that: (1) gymnastics grade predicts future flight success just about as well as overall physical training grade; and (2) no revised weighting system will improve the validity of the total grade.

4533. Woolf, Maurice D., & Woolf, Jeanne A. Remedial reading: Teaching and treatment. New

York: McGraw-Hill, 1957. viii, 424 p. \$5.75.—The nature and causes of reading problems among elementary-school, high-school, and college students are discussed. Chapters on methods, materials, and techniques for remedial teaching stress motivation and group procedures. Reading is treated as a function of the whole personality. Individual counseling is suggested for some cases, and projective techniques are included in evaluation of progress. Case studies illustrate the changes in personal adjustment which often accompany improvement in reading skills. Verbatim accounts of class discussions and counseling interviews further illustrate procedures. A plan for in-service training of teachers is presented.—E. L. Robinson.

4534. Wrigley, Jack. The factorial nature of ability in elementary mathematics. *Bull. Brit. psychol. Soc.*, 1957, 32 (Inset), 2-3.—Abstract.

(See also Abstracts 3783, 4121)

INTERESTS, ATTITUDES, & HABITS

4535. Albright, Lewis E., Kirsch, Arthur D., Lawshe, C. H., & Remmers, H. H. A longitudinal comparison of student attitudes toward minorities. *J. educ. Psychol.*, 1956, 47, 372-379.—Measures of attitudes toward Germans, Japanese, Jews, and Nazis were taken in the years 1935, 1942, 1945, 1947, and 1955. Subjects were presumably similar samples of introductory psychology students at Purdue. In each case Form A of "A Scale for Measuring Attitudes Toward Races and Nationalities" by Grice was utilized. Among findings: (1) a significant increase in favorable attitude toward Japanese, Jews, and Nazis since 1947, along with significantly greater homogeneity of attitudes toward Jews, and significantly greater heterogeneity of attitudes toward Nazis; (2) Germans were rated highest of the 4 groups in favorableness in each of the investigation; (3) no significant change in mean attitude toward Germans since 1947, despite a greater heterogeneity of attitude.—S. M. Schoonover.

4536. Dresher, Richard H. Seeds of delinquency. *Person. Guid. J.*, 1957, 35, 595-598.—This study reports the results of an interview and questionnaire study of 622 high school drop-outs. Of the 23 factors studied, 11 showed no significant differences between normal and anti-social students, 8 significant factors were concerned with group relationships and 4 significant factors could be related to poor personal relations.—G. S. Speer.

4537. Eaton, Merrill T., D'Amico, Louis A., & Phillips, Beeman N. Problem behavior in school. *J. educ. Psychol.*, 1956, 47, 350-357.—Problem behavior occurring in and out of school was investigated. Interviewed were 30 teachers, who taught approximately 2,000 different pupils during school year. Some of the findings: (1) there was an increase in problem behavior from grades one to 6 to grade 10 to 12; (2) boys were involved in more problem behavior than girls at all grade levels; (3) most types of problem behavior varied in frequency from grade level to grade level; (4) problem behavior among girls reached peak in grades 7 to 9, among boys in grades 10 to 12. 15 references.—S. M. Schoonover.

4538. Foreman, Clyde Melvin. Levels of aspiration and marital status on the college campus. *Dissertation Abstr.*, 1957, 17, 2082.—Abstract.

4539. George, Jane Pippin. A study of the patterns of social interaction at the senior high school level and their relationship to certain selected factors. *Dissertation Abstr.*, 1957, 17, 1705-1706.—Abstract.

4540. Green, Leah Ann. A study of creativity and the self-attitudes and sociability of high school students. *Dissertation Abstr.*, 1957, 17, 1807-1808.—Abstract.

4541. King, Charlyce Ross. Attitudes of college women toward student organizations at the University of Oklahoma. *Dissertation Abstr.*, 17, 1693.—Abstract.

4542. Maddox, George Lamar, Jr. A study of high school drinking: A sociological analysis of a symbolic act. *Dissertation Abstr.*, 1957, 17, 1621.—Abstract.

4543. Nelson, Suzanne. Changes in the solution of adolescent tasks by eleventh grade boys during one year and in terms of socio-economic status. *Dissertation Abstr.*, 1957, 17, 1952-1953.—Abstract.

4544. Plowman, D. E. G., & Leytham, G. W. H. How some university entrants see psychology. *Bull. Brit. psychol. Soc.*, 1957, 32, 34-43.—Questionnaires were issued to students attending their first lectures in psychology in Swansea and Liverpool. Similar misconceptions about psychology were found in both groups.—P. F. C. Castle.

4545. Rath, Radhanath. Attitudes of university students towards some socio-cultural and educational issues. *J. Educ. & Psychol., Baroda*, 1957, 14, 214-225.—The age-old ideologies in India are in transition. The attitudes of 800 university students towards some issues affecting their daily life were evaluated by means of statements graded on a five point scale. "In order to break the monotony, the language of the statements for different issues was changed slightly keeping the meaning and spirit constant." The students tended to favor the emancipation of women, joint family system, classless society, Gandhian principles, religion, Indian culture, co-education, and basic education. They did not, however, approve of the present system of education. The role of family occupation and economic status was also investigated.—D. Lebo.

4546. Sanford, Nevitt. (Ed.) Personality development during the college years. *J. soc. Issues*, 1956, 12(4), 3-70.—(1) An account of the situation of the Vassar student and of her most characteristic interview responses at various stages of her college career (Mervin B. Freedman); (2) quantitative analyses of intellectual functioning, academic achievement and personality functioning as reflected by various F, CPI, MMPI scales and specially developed scales (Harold Webster); (3) student typologies or "educational patterns" (Donald Brown); (4) Introduction and conclusions by the issue editor; (5) 37-item bibliography.—J. A. Fishman.

4547. Schutz, Richard Edward. Patterns of personal problems of adolescent girls. *Dissertation Abstr.*, 1957, 17, 1808.—Abstract.

4548. Sharma, T. R. Truancy in high schools. *Educ. & Psychol., Delhi*, 1956, 3(2), 31-35.—Through

a questionnaire sent to 50 teachers and headmasters of 7 Jullundur secondary schools it was found that both groups were of the opinion that severe punishment cures truancy. Yet interviews with these teachers that the use of punishment did not deter truancy but rather made it more certain.—H. Angelino.

4549. Stephenson, Richard M. Mobility orientation and stratification of 1,000 ninth graders. *Amer. sociol. Rev.*, 1957, 22, 204-212.—An analysis of the psycho-socio-economic factors affecting occupational plans and aspirations of freshman-level high school students. The hypothesis being tested was that sex, race, and class will define the social mobility of people. The results indicated that there is a greater discrepancy between realistic plans and more freer wishful aspirations at the lower end of the socio-economic scale than at the upper end. The lower class student realistically plans for an occupation commensurate with his socio-economic status as defined by his father's occupation, but basically would like to do more, whereas there is a greater concordance between plan and aspiration at the upper level. The conclusion is suggested that socio-economic status, in this way, does, in fact, serve to define occupational goals.—G. H. Frank.

4550. Touchstone, Frank Virgil. A comparative study of Negro and white college students' aggressiveness by means of sentence completion. *Dissertation Abstr.*, 1957, 17, 1588-1589.—Abstract.

4551. Vedavalli, H. C. Study habits of college students at Tirupati. *Educ. & Psychol., Delhi*, 1953, 3(3), 42-50.—In comparing the study habits of 212 college students, 114 in intermediate and 98 in degree classes, it was found that: (1) male students have better study habits; (2) no significant differences between degree and non-degree students; (3) rural students were slightly better than urban; (4) first born were better than others; (5) father's educational level had no influence on study habits.—H. Angelino.

4552. Vincent, Lena Pearl Duell. The religious concepts and attitudes of one hundred college students. *Dissertation Abstr.*, 1957, 17, 1710.—Abstract.

4553. Yoganarasimhiah, Malavalli. Some factors related to work attitudes in ninth grade boys. *Dissertation Abstr.*, 1957, 17, 1512-1513.—Abstract.

(See also Abstracts 3748, 3937, 3992, 4090, 4190, 4272)

SPECIAL EDUCATION

4554. Condon, Margaret E. A survey of special facilities for the physically handicapped in the colleges. *Personn. Guid. J.*, 1957, 35, 579-583.—A questionnaire study of 181 colleges with student bodies of 1,200 or more, indicated that 31 had organized programs for physically handicapped students, 105 offered some services but had no program, and 45 had neither program nor services. Detailed information is given for 40 colleges.—G. S. Spear.

4555. Gottsegen, Monroe George. The use of the Vineland Social Maturity Scale in the planning of an educational program for non-institutionalized low-grade mentally deficient children. *Dissertation Abstr.*, 1957, 17, 1595-1596.—Abstract.

4556. Morgan, A. B. Critical factors in the academic acceleration of gifted children: Hy-

potheses based on clinical data. *Psychol. Rep.*, 1957, 3, 71-77.—The following criteria, based on intensive study of 23 children, are offered as tentative predictors of the successful acceleration of mentally gifted children (Stanford-Binet IQs of 135 or higher): (a) Reading comprehension and vocabulary must be above the present grade level. Arithmetic reasoning must be at least at grade level. Spelling or computation or both must be at or above grade; neither spelling nor computation can be as much as a year below grade level. (b) Height or weight, or both, must be at or above the mean for the modal age of the present grade; neither height nor weight can be more than one standard deviation below this mean; (c) There must be no objection to the child's acceleration on the part of the parents.—C. H. Ammons.

4557. Passow, A. Harry. For talented students. *N. Y. State Educ.*, 1956, 43, 606-610.—"We need total school planning to identify and cultivate the talents of our gifted children. . . . The task of the school is to seek out children and youth whose abilities require special educational opportunities and guidance." Various procedures for adapting the curriculum to their needs are discussed, and many suggestions are given for school planning for gifted children.—L. D. Summers, Jr.

4558. Pelone, Anthony J. Helping the visually handicapped child in a regular class. New York: Bureau of Publications, Teachers College, Columbia University, 1957. viii, 99 p. \$1.55.—This monograph is designed for regular classroom teachers and other school personnel coming in contact with visually handicapped children. The 3 main chapters discuss visual handicaps and school adjustment, the partially seeing child in the regular class, and the blind child in the regular class. Appendices include a glossary of eye terms; equipment, and materials for partially seeing pupils and for blind children in regular classes.—B. Lowenfeld.

(See also Abstract 4315)

EDUCATIONAL GUIDANCE

4559. Beilin, Harry. The utilization of high level talent in lower socio-economic group. *Personn. Guid. J.*, 1956, 35, 175-178.—To solve the present and anticipated shortages of high level talent larger numbers of highly capable youth from lower socio-economic groups must be motivated to attend college. The role of scholarship programs, and some factors in social mobility are discussed.—G. S. Speer.

4560. Benson, Gerald Philip. An evaluation of teacher ability to identify maladjusted children. *Dissertation Abstr.*, 1957, 17, 1946-1947.—Abstract.

4561. Bhatt, L. J. All-India seminar on educational and vocational guidance. *J. voc. educ. Guid.*, 1956, 3, 33-37.—Summary of recommendations stemming from the third seminar held at Baroda in February, 1956. Psychological tests were de-emphasized while USA standards for test manuals were adopted with the expressed hope that validation studies be continued "for a reasonable period of time." 2 levels of guidance counselors were distinguished and minimum training requirements were set up.—W. L. Barrette, Jr.

4562. Farwell, Gail F., & Peters, Herman J. Guidance: A longitudinal and a differential view. *Elem. Sch. J.*, 1957, 57, 442-445.—A guidance program must be considered on a longitudinal basis beginning at the kindergarten level. The author points out various aspects of the problem and analyzes seven differential factors in elementary school guidance. He concludes that it must be carefully planned through school experiences which reflect the integration of all forces impinging upon the child.—S. M. Amatora.

4563. Fricke, Benno G. Students' reactions to a personality inventory. *Personn. Guid. J.*, 1956, 35, 171-174.—Of 63 students who completed an attitude and opinion inventory, not one guessed that it could be used to predict academic achievement, and only a few found it uninteresting or boring. It is felt that inventories with apparently neutral items, such as this one, would contribute more to testing and counseling programs.—G. S. Speer.

4564. Harris, Philip. The guidance of business students in selected secondary schools. *Personn. Guid. J.*, 1957, 35, 591-594.—The results of a questionnaire study of 106 private secondary schools offering business training are described in detail. Two-thirds of the schools thought their guidance services were inadequate for business students. Some recommendations for improved services are offered.—G. S. Speer.

4565. Hilton, M. Eunice. (Ed.) Guide to guidance. Vol. XX. A selected bibliography of 1957 publications of interest to deans, counselors, advisers, teachers, and administrators. Syracuse: Syracuse Univer. Press, 1958. 58 p. \$1.50.—The present edition of this selected bibliography compiled by five of Dean Hilton's students includes the following classifications: society and education, issues within the schools and colleges, individual and group relationships, organization and administration of student personnel work, areas and materials of interest to counselors, and source materials and related materials. The present volume is based on the literature for 1957 with the previous years covered in prior volumes such as 31: 6657 for 1956. A sentence or two is used to summarize each entry in the bibliography.—W. Coleman.

4566. Hoey, Ann Francis. A comparative study of the problems and guidance resources of Catholic college women. Washington, D. C.: Catholic Univer. Press, 1957. xi, 220 p.—A doctoral dissertation that "is an attempt to answer the questions: (1) What are specific problems that confront Catholic college students in (a) Catholic colleges, (b) non-sectarian institutions? (2) What differences are discernible between (a) students in the various classes, (b) the resident and non-resident students? (3) To whom are these students turning for advice? (4) For what areas of guidance are the Catholic colleges assuming responsibility? (5) How adequately is the present personnel program providing assistance to the students in the Catholic colleges?"—D. J. Wack.

4567. Horst, Paul. Educational and vocational counseling from the actuarial point of view. *Personn. Guid. J.*, 1956, 35, 164-170.—The essential difference between the actuarial or statistical approach to prediction and other approaches consists of the ex-

tent to which the counselor is willing to specify the factors which he takes into consideration in making his prediction, the extent to which he is willing to specify the bases on which he makes discriminations with the factors he does use, and the extent to which he is willing to make explicit his methods for synthesizing the preactivity information about the client as a basis for making predictions.—G. S. Speer.

4568. Hughes, E. W. Some problems of vocational guidance in Great Britain. *Educ. & Psychol., Delhi*, 1956, 3(4), 15-26.—The Ince Report of 1945 recommended, in effect, that vocational guidance "be made available to all school leavers up to age of 18 years." The present article discusses the problems faced by the British Youth Employment Service in carrying out this recommendation. Statistics for a 3-year period (1950-53) show that 81% of the 1,833,689 new entrants into National Insurance received individual counseling and 1,385,083 persons received follow-up study.—H. Angelino.

4569. Jayasuriya, J. E. The use of cumulative records in educational guidance. *Educ. & Psychol., Delhi*, 1956, 3(4), 71-75.—Cumulative records are the important media through which one achieves a "clear cut and comprehensive picture of the child to be guided." What information such records should contain are discussed under 4 headings: (1) personal history and environmental background; (2) assessments of abilities and attainments; (3) records of interests; (4) assessments of personality characteristics.—H. Angelino.

4570. Lay, Archie Wilson. A study of the influence of an interest inventory on choice of major and subsequent academic behavior. *Dissertation Abstr.*, 1957, 17, 1707-1708.—Abstract.

4571. McWilliams, Earl M., & Birch, Jack W. Counseling gifted children. *Voc. Guid. Quart.*, 1957, 5, 91-94.—Vocational guidance serves the gifted pupil best when it encourages him to acquire a broad cultural education early and defer narrowing occupational interest until post high school. The best preparation a gifted child can have is to become adaptable to change especially in the choice of a vocation. 3 criteria are proposed as measures of the successful guidance program for the gifted.—F. A. Whitehouse.

4572. Mehta, Prayag. School guidance service in India. *Educ. & Psychol., Delhi*, 1956, 3(4), 42-50.—Guidance services in India are developing in two directions, in secondary education and as a youth counseling service, thereby including the entire youth population both in and out of school. Besides satisfying individual needs guidance must also satisfy social needs. For India this means the fulfillment of her 5-year plans. Needs for research into the problems of education are stressed. 21 references.—H. Angelino.

4573. "Schoolmaster." The role of guidance and counseling in the reconstructed secondary education system. *Educ. & Psychol., Delhi*, 1956, 3(4), 51-63.—Writing under a pseudonym, one of India's top authorities on guidance tells what he believes to be the role of guidance services in India's secondary school systems. Dynamic guidance is concerned: (1) with the classification of pupils for further education; (2) with cumulative records of data arrived at through testing, interview, and observation. There is an orientation program, both cur-

ricular and vocational, for pupils and their parents. For school leavers educational guidance is necessary for preparing them for suitable work after leaving school, or for "placing" them as apprentice workers or for "post secondary education" in other institutions.—H. Angelino.

4574. Sharma, Shambhu La. Guidance needs of secondary schools. *Educ. & Psychol., Delhi*, 1956, 3(4), 76-79.—The guidance needs of secondary school youth of India are discussed by an educational administrator. He classifies these needs into 5 categories: economic, physical, psychological, curricular, and vocational.—H. Angelino.

4575. Sinick, Donald, & Hoppock, Robert. Research on the teaching of occupations, 1954-1955. *Personn. Guid. J.*, 1956, 35, 155-160.—This is a review of research on the teaching of occupations, primarily of material published in 1954 and 1955. General conclusions are that high school courses in occupations increased earnings and job satisfaction, and improved academic achievement in college. 26 studies are reviewed.—G. S. Speer.

4576. Slatkin, M. N. Polytechnical training and vocational guidance in secondary schools in the U.S.S.R. *Educ. & Psychol., Delhi*, 1956, 3(4), 1-14.—Because many pupils go directly to occupations from secondary schools, the Soviets have made polytechnical training an important adjunct to the regular curriculum. Their general secondary school has always sought to maintain a close connection in the real life by providing practical training in the important branches of industrial and agricultural production. The necessity of polytechnical training in the vocational guidance of secondary school youth is particularly stressed, since this training is one of the "Indispensable preliminaries for the transition from socialism to communism." The substance of polytechnical education; the teaching of general technical subjects; pupil participation in productive work; and the wide development of extra-mural work in the technical colleges and agricultural and mechanical trades are all aimed at providing each pupil with the knowledge and skills to make the proper occupational choice as well as to the eventual mastery of his chosen occupation.—H. Angelino.

4577. Smith, Louis M. An observation on elementary school guidance. *Personn. Guid. J.*, 1956, 35, 179-180.—After examining the responses of 42 teachers to an inventory concerned with the role and function of a school guidance worker, the author concludes that a thorough assessment of teacher opinions is an important but neglected need in the area of elementary guidance.—G. S. Speer.

4578. Stewart, Lawrence H. Teachers and counselors look at students: Some implications for guidance practice. *Personn. Guid. J.*, 1957, 35, 565-568.—Using the Robinson questionnaire 94 counselors and 169 classroom teachers indicated the kind of help to be given to students presenting a variety of problems. The similarities in recommendations, particularly of inappropriate treatment, leads to the conclusion that many counselors are essentially teachers. It is felt that it is better to hire a trained counselor than a classroom teacher for counseling positions.—G. S. Speer.

4579. Strom, C. Group guidance and vocational orientation. *Educ. & Psychol., Delhi*, 1956, 3(4),

80-84.—Asserting that group guidance is a must in all countries but more so where the educational pattern is changing, the author outlines his views of the function of the counselor in his role of aiding secondary school pupils (and their parents) in obtaining the proper knowledge and information which will permit logical and adequate decision-making concerning their future careers.—*H. Angelino.*

4580. Willis, Benjamin C. The contribution of guidance to the high school educational program. *Personn. Guid. J.*, 1957, 35, 489-494.—The principles, functions, and roles of a guidance program in the high schools is discussed.—*G. S. Speer.*

(See also Abstracts 4148, 4596)

EDUCATIONAL MEASUREMENT

4581. Ainsworth, Laban Linton, Jr. An exploratory study of the academic achievement of Arab students. *Dissertation Abstr.*, 1957, 17, 1702-1703.—Abstract.

4582. Asthana, B. C. A note on the examinations research project at the Aligarh Muslim University. *J. Educ. & Psychol., Baroda*, 1956, 14, 149-153.—The antecedents of the examinations research project and a brief outline of plans for the next 3 years are presented. 3 main lines of research are contemplated: (1) the reliability of essay examinations; (2) periodic testing of achievement by more comprehensive objective tests; and (3) the problem of summation of marks, i.e., assigning weights to the various examinations in evaluating a candidate's achievement. It is proposed "to work in the form of specific projects so designed that ultimately all these projects are fitted within a broad framework, and no project falls apart as not related to the whole." 8 projects now in process are listed.—*D. Lebo.*

4583. Baron, Denis, & Bernard, Harold W. *Evaluation techniques for classroom teachers.* New York: McGraw-Hill, 1958. xi, 297 p. \$5.50.—A beginner's resume of the areas in tests and measurements most commonly used in the classroom. Areas covered include: sampling pupil behavior, how to identify a good test, use of norms, intelligence testing, evaluating pupil achievement, reading and personality appraisals, measurements of social relationships, interests and attitudes, rating techniques, teacher-made tests, and general over-all comments.—*G. Elias.*

4584. Berk, Robert Lloyd. A comparison of performance of subnormal, normal, and gifted children on the Oseretsky Tests of Motor Proficiency. *Dissertation Abstr.*, 1957, 17, 1947-1948.—Abstract.

4585. Booth, Mary D. A study of the relationship between certain personality factors and success in clinical training of occupational therapy students. *Amer. J. occup. Ther.*, 1957, 11(2), 93-96; 126-127.—A study to determine "whether Guilford's Inventory of Factors STDCR and the Kuder Preference Record can be used as predictors of success of occupational therapists." 5 male and 86 female occupational therapy graduates of San Jose State College in California were administered the Kuder Preference Record and the Guilford STDCR Inventory and these scores compared with grades in

each field of clinical training, a total grade and the registration examination. At the 1% level of confidence, correlations with grades on the registration examination were found for "literary interest" as measured on the Kuder and for the R factor on the Guilford STDCR Inventory.—*M. A. Seidenfeld.*

4586. Breslow, E. The predictive efficiency of the Law School Admission Test at the New York University School of Law. *Psychol. Newsltr, N. Y. U.*, 1957, 9, 13-22.—"The correlation between the Law School Admission test scores and first-year law grades was .56, significant at the 1% level of confidence. The correlation between LSAT scores with three-year law grades was also .56, significant at the 1% level of confidence." 25 references.—*M. S. Mayzner.*

4587. Bunker, Harris F. La preparación de pruebas objetivas de aprovechamiento. (The construction of objective achievement tests.) *Pedagogia, Rio Piedras*, 1957, 5(1), 83-93.—The construction of the following objective types of questions is considered, recall, true-false, multiple choice, and matching. The organization of the questions is briefly discussed.—*E. Sánchez-Hidalgo.*

4588. Chambers, John Richard, Jr. The relationships among measurable mental tasks related to reading. *Dissertation Abstr.*, 1957, 17, 1514-1515.—Abstract.

4589. Christiaens, X. De betekenis en de waarde van de Kuderbelangstellingstest voor het psychologisch onderzoek in het voortgezet middelbaar onderwijs. (Significance and value of the Kuder interest test for psychological testing in secondary schools.) *Tijdschr. Studie-Beroepsoriënt.*, 1957, 4, 13-28.—The Kuder interest test measures an essential feature of personality. The author established a standardization on 600 Belgian students and found profound differences from American students. Success at the university is not a good criterion of validity for interest tests or for intelligence tests, because too many other factors play important parts in determining it. French summary.—*R. Piret.*

4590. Davidson, Helen H., & Balducci, Dom. Class and sex differences in verbal facility of very bright children. *J. educ. Psychol.*, 1956, 47, 476-480.—Subjects were 20 boys and girls of high social status and 20 boys and girls of low social status. The former were students at a private experimental school, the latter were students at a special experimental public school. Age range was 9 to 14 years and IQ range was 120 to 157. The 2 groups were matched for age, IQ, and personality adjustment based on Rorschach protocol. Verbal facility was measured in 3 ways using responses to Cards I, III, VI, and X of Rorschach test. Analysis of data revealed no significant differences between the sexes or between the classes for any of the 3 measures of verbal facility used. Interaction between sex and class likewise was not significant. The most nearly significant difference between 2 social classes was in number of uncommon words used.—*S. M. Schoonover.*

4591. Dawson, Martha Eaton. A study of vocabulary size of third grade pupils in relation to home-environmental factors. *Dissertation Abstr.*, 1957, 17, 1515.—Abstract.

4592. Delrez, H. Un facteur psychologique intervenant dans le rendement scolaire: Le professeur. (An intervening psychological factor in scholastic achievement: The professor.) *Cah. Pédag.*, 1957, 16, 149-157.—The author gave a questionnaire concerning attitudes toward their mathematics teacher to 122 students, age 15. The correlation between the questionnaire and achievement in mathematics shows a certain amount of influence of the professor on scholastic accomplishment, especially for the middle and poor students.—R. Piret.

4593. Dobbin, John E. Measuring achievement in a changing curriculum. In *Proc. 1956 invitational conference on testing problems*. Princeton: Educational Testing Service, 1956, 103-113.—A continuing change in the school population and a shift in the theoretical outlook on learning have produced profound changes in curricula during the last 25 years. These changes have modified achievement testing so that it is more concerned with central skill outcomes than with specific course content.—R. L. McCornack.

4594. Englehart, Helen V. An investigation of the relationship between college grades and on-the-job performance during clinical training of occupational therapy students. *Amer. J. occup. Ther.*, 1957, 11(2), 97-101; 107.—A study to determine the predictive value of: (1) "performance in required college courses for performance on-the-job during clinical training"; (2) "performance in required courses for the national registration examination"; and (3) performance on the job during clinical training for the national registration examination. The subjects were 104 graduates of San Jose State College in California. Their college course grades, on-the-job performance, the registration examination grades were inter-correlated. The findings reveal the "on-the-job performance during clinical training, and performance on the registration examination for occupational therapy students may be predicted from performance in some required college courses." Similarly, on-the-job performance in some college courses or during some clinical training does not predict performance on the registration exam.—M. A. Seidenfeld.

4595. Fast, Irene. Kindergarten training and Grade I reading. *J. educ. Psychol.*, 1957, 48, 52-57.—Differences between 134 children with kindergarten training and 46 otherwise comparable children without such training were examined. Those with kindergarten training achieved significantly higher scores on all reading tests (administered at beginning, middle, and end of grade I) than those with no such training. The extent to which such differences may exist and persist in other academic areas was explored.—S. M. Schoonover.

4596. Fischer, H. La rapidité de calcul est-elle un critère suffisant pour l'orientation scolaire et professionnelle. (Is computational speed a sufficient criterion for academic and vocational guidance?) *Rev. belg. Psychol. Pédag.*, 1957, 19, 19-32.—Testing computational speed appears to be a good way to appraise the mental level of advanced primary students or of secondary students. But tests of computational speed are not enough for the use of the guidance counselor because they are too specific, measuring only the numerical factor, N.—R. Piret.

4597. Floud, Jean, & Halsey, A. H. Intelligence tests, social class and selection for secondary schools. *Brit. J. Sociol.*, 1957, 8, 33-39.—It is shown that quite small fluctuations in size and social composition of the age group can give rise to quite marked swings in the terms of competition for a fixed number, or even proportionate provision of grammar school places. Ability and opportunity cannot remain in close relationship where competitive exams are given and are not "culture-free."—R. M. Frumkin.

4598. Freidman, Morton P., & Fleishman, Edwin A. A note on the use of a "don't know" alternative in multiple choice tests. *J. educ. Psychol.*, 1956, 47, 344-349.—Effects of adding a "don't know" response choice to a variation of the Rhythm Discrimination subtest of the Seashore Measures of Musical Talents were analyzed. Subjects were 594 basic trainee airmen at Lackland Air Force Base. Findings: (1) a significant increase in reliability of total rights score as a function of adding "don't know" alternative, (2) the above increase in reliability was most pronounced for the most difficult part of test, (3) in situation where a "don't know" response was allowed, the rights score alone was equal or superior in reliability to a rights minus wrongs score.—S. M. Schoonover.

4599. Gilbert, Arthur C. F. Effect of immediacy of knowledge of correctness of response upon learning. *J. educ. Psychol.*, 1956, 47, 415-423.—Purpose of study was to discover effect of SRA Self-scorer upon learning when used in testing situation compared to standard answer sheets accompanied by class discussion of test items. Among findings: (1) In general, students required twice the amount of time to complete a test by use of SRA Self-scorer than by other methods; (2) When gain on same test was employed as a criterion those using standard answer sheets accompanied by discussion performed significantly better than those using SRA Self-scorer; (3) SRA Self-scorer does not significantly affect learning on items measuring one type of learning more than on items measuring other types of learning.—S. M. Schoonover.

4600. Gopal, D. Construction of an achievement test in chemistry for the X class stage of Delhi higher secondary schools. *Educ. & Psychol. Delhi*, 1956, 3(1), 17-21.—The procedures involved in constructing a chemistry achievement test for use in the Delhi Higher Secondary schools are discussed. A tryout on 180 pupils showed that: (1) marks followed closely the normal curve, (2) there was a marked difference in ability between boys and girls, and (3) factual items were answered better than those involving reasoning and interpretation.—H. Angelino.

4601. Hacker, Louis M. New kinds of students and new ways of testing achievement. In *Proceedings of the 1956 invitational conference on testing problems*. Princeton: Educational Testing Service, 1956, 95-102.—The adult education program of the School of General Studies of Columbia University is described. Not only the size but the character of the student body will change in the near future. To meet these problems it is proposed to establish a group of universities which will serve as examining bodies for many instructional institutions.—R. L. McCornack.

4602. Harmon, Lindsey R. Fellowship selection research, a four-year progress report. Washington, D. C.: National Academic Services, National Research Council, Office of Scientific Personnel, 1957, 37 p.—A report of research undertaken to study the fellowship program of the National Science Foundation. The study reports on the development of a factor analyzed confidential report form to obtain recommendations; the use of panels to evaluate the information available on a candidate; the different levels of ability applying in different academic fields and analyses of the operations of panels. Some validity studies are included. The appendix includes eight briefs of technical reports.—D. R. Krathwohl.

4603. Harrower, Molly. Screening . . . for what? The relevant use of psychological tests in medical education. *Brit. J. med. Psychol.*, 1957, 30, 19-26.—A battery of 8 usual standard clinical psychological tests was administered to medical students. In addition to use of the results as a basis for referral for counseling and helping interested students to greater self-understanding, there are preliminary results which suggest that the test battery permits prediction of success in academic work.—C. L. Winder.

4604. Hashimoto, Juji. Tōan henkyaku no hōhō ga gakushū-kōkai ni oyobosu eikyō no kenkyū. (Effects of various methods of returning test papers upon achievement of pupils.) *Jap. J. educ. Psychol.*, 1956, 3, 146-156.—4 ways of handling test papers were compared: (1) no returning, (2) returning without comment, (3) returning with instruction to recheck the test, and (4) returning with corrective comments. Experimental result showed that Method IV was most effective, II and I the least. The differential effect was especially clear in low ability pupils. English summary, p. 184-185.—S. Ohwaki.

4605. Hoehn, Arthur J., & Saltz, Eli. Effect of teacher-student interviews on classroom achievement. *J. educ. Psychol.*, 1956, 47, 424-435.—3 experiments attempted to reproduce facilitating results of teacher-student interviews using as interviewers a random sample of Air Force teachers who were given interview training involving lectures and role playing. Results suggest that "gripe-oriented" interview techniques may decrease failure rate for anxious students, but may increase failure rate for rigid students. Interviews oriented toward personal sources of satisfactions seem to decrease failure rate among borderline achievement rigid students. In all 3 experiments average grades of interviewed students were no better than average grades of noninterviewed students. It is concluded that teacher interviews may be harmful in some cases and that caution should be exercised in recommending that teachers counsel their students.—S. M. Schoonover.

4606. Kaplan, Henry Kay. A study of relationships between handwriting legibility and perception adjustment and personality factors. *Dissertation Abstr.*, 1957, 17, 1950.—Abstract.

4607. Ketcham, Warren A. So many average students. *N. Y. State Educ.*, 1956, 44, 173-177.—A comparison of the "measured learning ability and measured academic achievement" of high school students (N = 56) of a graduating class revealed a correlation of .85 between the two. "A coefficient of correlation of this size indicates that the school is

successfully meeting a wide range of individual differences in learning ability." The problem of the wide spread in learning ability within a single class is discussed through analyzing the performances of 3 students representing varying ability and achievement levels. Finally, recommendations based on the University School's experience in coping with these variations are given "which should be helpful to high school administrators, counselors, teachers and parents."—L. D. Summers, Jr.

4608. LeBold, William Kerns. A longitudinal study of Purdue engineering students. *Dissertation Abstr.*, 1957, 17, 2057-2058.—Abstract.

4609. Loeb, Joe Henry. A vocabulary study of fourth, fifth, and sixth grade children. *Dissertation Abstr.*, 1957, 17, 1494-1495.—Abstract.

4610. Masaki, Masashi. Kōdō hyōka no kinyū keishiki ni kansuru kenkyū: III. (On the recording form of personality evaluation at Japanese elementary school: III.) *Jap. J. educ. Psychol.*, 1956, 3, 189-203.—A new form of personality evaluation developed by the writer was critically evaluated by school teachers and educational psychologists. Teachers, as recorders, indicated that the new form is convenient in recording and can give a more valid figure of personality as a whole. Some of the educational psychologists presented critical opinions. It was concluded that personality evaluation is a difficult task and its validity depends upon the object of education. English summary, p. 243-244.—S. Ohwaki.

4611. Mitchell, James V., Jr. A comparison of the factorial structure of cognitive functions for a high and low status group. *J. educ. Psychol.*, 1956, 47, 397-414.—Subjects were 11- and 12-year-olds from selected schools in and near Chicago. A battery of 18 mental tests was administered to 351 pupils from well-defined high and low status groups. Test scores were intercorrelated for each group; correlation matrices thus obtained were factored by means of Thurstone's complete centroid method. A multiple group analysis compared correlations between factors extracted. Although essentially the same factors were identified for both status groups, organization of mental abilities was found much less differentiated for the low status group. Roles played by verbal meaning and word fluency factors suggested that lack of differentiation associated with the low status group was at least partly the result of increased saturation of general factor with verbal components. 15 references.—S. M. Schoonover.

4612. Ringel, Seymour. School grades as criteria for test validation: Yeoman and Radioman Class A schools (Bainbridge). *USN Bur. Nav. Person. tech. Bull.*, 1957, No. 57-4. viii, 18 p.—Enlisted classification procedures are based primarily on Basic Test Battery (BTB) scores, validated against final grades in training schools. For the schools in this study, the correlations between BTB tests and final grades were low; thus certain sources and effects of errors in the routinely reported criterion grades were examined. An evaluation was made of the effect on validity coefficients of missing records, clerical errors, reliability of final grades, and method of computing validities. The extent of error introduced by these sources was not sufficient to affect materially the validity coefficients.—H. P. Kelley.

4613. Roach, James H. L. Relationship of success in lower and higher level military schools. *J. educ. Psychol.*, 1956, 47, 329.—Subjects were 319 students in the Air Command and Staff School who had previously attended the Air Tactical School. The relationship between 4 "recommendation" groups of ATS graduates and their final cumulative weighted mean t scores in AS&SS were statistically significant. In addition, a correlation coefficient of 0.68 was secured between grades of 239 students who had attended both schools.—S. M. Schoonover.

4614. Rodgers, Edelbert George. The relationship of certain measurable factors in the personal and educational backgrounds of two groups of Baltimore Negroes, identified as superior and average in intelligence as fourth grade children, to their educational, social and economic achievement in adulthood. *Dissertation Abstr.*, 1957, 17, 1709.—Abstract.

4615. Rogers, Vincent R. Children's musical preferences as related to grade level and other factors. *Elem. Sch. J.*, 1957, 57, 433-435.—The author devised a test which was given initially to 51 children in grades 1, 4 and 7 and after revision was administered in a final experiment to a group of 635 pupils in grades 4, 7, 9, and 12 from six school systems. An analysis of the findings of the study are presented for various grade levels, rural versus urban schools, upper versus lower socioeconomic status, and boys versus girls. Conclusions are presented in detail.—S. M. Amatora.

4616. Ross, Sherman; Denenberg, Victor H., & Chambers, Randall M. Development of high level science talent. *Sci. Teacher*, 1956, 23, No. 6.—The 26 superior secondary school students selected for the Science Research Apprenticeship Program for Pre-Collegiate students at Jackson Memorial Laboratory in the summer of 1955 were asked to write an autobiographical essay to provide information on the factors which led to their interest in a scientific career. While quite a number of factors were revealed, the predominant one was the influence of teachers in high school and even in grade school.—M. Murphy.

4617. Schoonover, Sarah M. A longitudinal study of sibling resemblances in intelligence and achievement. *J. educ. Psychol.*, 1956, 47, 436-442.—Subjects were all true sibling pairs who attended University of Michigan Elementary School, who had chronological age overlap, and who took Stanford-Binet & Stanford Achievement Tests 4 or more times per sib, from 1929-1951. Growth graphs were constructed for members of each family for each of following measures: mental, arithmetic, education, language, literature, reading, science, social studies, and spelling. Means of average differences in mental and educational age scores were found for sib and for unrelated pairs. Average variation of the 9 measures for siblings was 33% less than that for unrelated pairs. Except for science, all differences between sib pair means and nonsib pair means were significant. Correlations for the siblings ranged from .39 to .71, and all were significant.—S. M. Schoonover.

4618. Schroder, Harold M., & Hunt, David E. Failure-avoidance in situational interpretation and problem solving. *Psychol. Monogr.*, 1957, 71(3),

(Whole No. 432). 22 p.—A variety of experimental procedures were administered to college and high school males for the purpose of testing a series of hypotheses relative to failure-avoidant behavior. In general the findings may be dichotomized into: (a) Ss who established relatively higher goals, utilized fewer alternative solutions, and performed less effectively after failure, and (b) Ss who avoid failure, maintain their self-evaluation after criticism, give higher evaluations after a "failing" score, and who over-evaluate their performance. Because the population studied was limited to high school and college students, the authors avoid generalizations but recommend their approach as the basis for further studies of behavior under negative conditions. 27 references.—M. A. Seidenfeld.

4619. Scott, J. C., & Burke, N. B. An automatic examination machine for medical students. *J. med. Educ.*, 1957, 32, 427-432.—A self-pacing drum presents 50 multiple-choice questions in succession, with the examinee recording his 1-in-5 answer choice for each item. The 150 counters provide item counts for rights, wrongs, and omits. Immediate knowledge of item results is provided the student by a green or red light, while the total test score is read directly on a single counter. The device has been used on a voluntary basis by students as a learning aid while the course is in progress. Spanish summary.—J. T. Cowles.

4620. Shake, James Curtis. Devising a test to measure some areas of difficulty in reading piano music. *Dissertation Abstr.*, 1957, 17, 1779.—Abstract.

4621. Silva, Alfredo. La evaluación del aprovechamiento. (The evaluation of achievement.) *Pedagogía, Rio Piedras*, 1957, 5(1), 65-82.—The following topics are briefly discussed: educational philosophy, goals and evaluation, measurement and evaluation, the definition of achievement, achievement tests and other techniques.—E. Sánchez-Hidalgo.

4622. Straley, Harry Goff. A comparative study of the academic achievement and social adjustment of transported and non-transported high school seniors. *Dissertation Abstr.*, 1957, 17, 1495-1496.—Abstract.

4623. Stroud, James B., Blommers, Paul, & Lauber, Margaret. Correlation analysis of WISC and achievement tests. *J. educ. Psychol.*, 1957, 48, 18-26.—Effectiveness with which all or various combinations of WISC subtests could predict performance on Reading Comprehension, Arithmetic, and Spelling tests of Iowa Tests of Basic Skills battery was examined. Sample was composed of 775 pupils in grades 3 to 6. Stanford-Binet IQs were available for 621 of these pupils, who were drawn from a 20 county area in Iowa. All pupils were "referals," with mean WISC IQ of 89.0. Among the findings: (1) correlation between WISC Full Scale IQs and S-B IQs was 0.94, (2) WISC Full Scale IQs correlated with each of achievement test scores to a greater extent than S-B and ITBS, (3) the most useful subtests in prediction of school achievement were Arithmetic, Vocabulary, Block Design, and Object Assembly, and (4) the total score was the most revealing score, however, for prediction of academic achievement.—S. M. Schoonover.

4624. Tallent, Norman. Behavioral control and intellectual achievement of secondary school boys. *J. educ. Psychol.*, 1956, 47, 490-503.—Relationships between behavioral control and intellectual achievement of 198 ninth-grade boys of the Elgin, Ill., public schools were investigated. Behavioral control was defined in terms of ratings by teachers on the Behavioral Control Rating Schedule, which was developed for this study. Intellectual achievement was determined by an extensive battery of mental tests. A strong tendency was found for subjects rated as showing a high degree of control to obtain the highest IQ scores, and for subjects rated as inferior on control to receive the lowest scores. Certain relative strengths and weaknesses also were discovered to be associated with different levels of behavioral control. Some possible implications of the above for student guidance were presented. 15 references.—S. M. Schoonover.
4625. Tanaka, Kumajiro. Gakkyū shakai ni okeru 'shakai-teki kyōkansei' no hattatsu to henyō: Kyōiku shinrigaku ni okeru sociometry hatten no hōkō. (Development and modification of sociopathy in class society; New direction of sociometry in educational psychology.) *Jap. J. educ. Psychol.*, 1956, 3, 133-145.—The sociopathic measurement was used in studying the development and the change of sociopathy in school children. The result was expressed by rank order of its status score and by diagrams. They showed that sociopathic relation changes by regrouping of classes and develops with increasing age. The writer concludes that sociopathy develops and is modified by perception, learning or experiences. Therefore it could be improved through training, guidance or therapy. English summary, p. 184. 21 references.—S. Ohwaki.
4626. Tandom, R. K. Test of analogies as a measure of "g." *Educ. & Psychol., Delhi*, 1956, 3 (4), 67-70.—The analogies test as a measure of "g" was investigated using 1,000 Banaras Hindu University students who were given an analogies test among a group of others. Results suggest that abilities as measured by analogies test overlap considerably with abilities as measured by other tests. Generally speaking the analogies have the highest amount of "g" saturation as compared to other tests.—H. Angelino.
4627. U. S. Naval Personnel Measurement Research Branch. Basic Test Battery validity for Class A and P schools (enlisted men). *USN Bur. Nav. Person. Res. Rep.*, 1957, No. 57-1, viii, 45 p.—The effectiveness of the Navy Basic Test Battery (BTB) in predicting performance of enlisted men in Class A and B schools was investigated by correlating scores on different tests of the Battery with final grades obtained in the appropriate schools in 1951-53. Charts show the percentage of men within a particular test score range who got below and above the average final mark for a particular school; a table indicates the correlations of BTB scores with final marks at each particular school. For the majority of schools studied the relationships found were satisfactory.—H. P. Kelley.
4628. van der Merwe, A. B., & du Toit, J. M. Sukses en mislukking van eerstejaarsstudente. (Success and failure of first year students.) *J. soc. Res., Pretoria*, 1956, 7, 27-34.—Academic success and failure of a first-year student population at a South African university is analyzed, with respect to age distribution, main direction of study, sex, success in school and intelligence. An attempt is made to assess the cause or causes of failure in individual cases, leading to the conclusion that in at least half of these cases failure could have been avoided." Dutch and English summaries.—N. De Palma.
4629. Vanhuyse, A. Enkele bevindingen bij een algemeen psychologisch onderzoek in het middelbaar onderwijs, lagere cyclus. (Some findings in a general psychological examination in secondary schools.) *Tijdschr. Studeren Beroepsoriënt.*, 1957, 4, 64-77.—Correlation of tests of technical intelligence with scholastic marks is high enough to warrant introducing them into the psychological examinations given in secondary schools. Tests of attention give useful results. Tests of memory are of less discriminative value. Multiple correlations of the entire group of tests are high. French summary.—R. Piret.
4630. Weigand, George. Adaptiveness and the role of parents in academic success. *Personn. Guid. J.*, 1957, 35, 518-522.—A study of a group of scholastically successful and scholastically unsuccessful students indicates that the successful student is one who has been taught to act as an adaptive individual in all situations, and the adaptive behavior has been supported by favorable parental attitudes.—G. S. Spear.
4631. Wellman, F. E. Differential prediction of high school achievement using single score and multiple factor tests of mental maturity. *Personn. Guid. J.*, 1957, 35, 512-517.—The relation of teachers' marks and scores on the Otis Quick Scoring Mental Ability Tests and the SRA Primary Mental Ability Tests was determined for 136 eleventh and twelfth grade pupils. It is concluded that the results justify the use of a battery composed of a single score test and a multiple factor test for the prediction of differential achievement.—G. S. Spear.
4632. Whittington, R. W. T. The assessment of potential musical ability in secondary school children. *J. educ. Psychol.*, 1957, 48, 1-10.—The Wing tests of musical intelligence, the 1947 Raven Progressive Matrices Intelligence Test, and the Minnesota tests of manual dexterity were administered to assess musical ability and appreciation and to select an economical battery of Wing's musical tests. 2 groups each of 24 boys were carefully selected—musical and nonmusical. Results appeared to indicate that musical group was superior to nonmusical group because of musical experience, which accounted for about 40% of the performance. Tests 2, 3, and 7 of Wing tests yielded significant multiple correlations. The correlation of performances in musical tests with matrices intelligence test was significant but not high. Manual dexterity tests gave no significant results. 20 references.—S. M. Schoonover.
4633. Wood, Ben D. Testing—then and now. In *Proceedings of the 1956 invitational conference on testing problems*. Princeton: Educational Testing Service, 1956, 58-75.—Major changes in the philosophy and practice of achievement testing during the past 30 years are discussed. Emphasis is placed upon the increased acceptance of objective tests, the use of test scoring machines, and more reliance upon systematic, cumulative testing.—R. L. McCornack.

(See also Abstracts 3542, 4015)

EDUCATIONAL STAFF PERSONNEL

4634. Allen, Robert F. A preliminary exploratory study of authoritarianism as manifested in the formal education of children. *Dissertation Abstr.*, 1957, 17, 1590.—Abstract.

4635. Appleby, Thomas Loring, & Haner, Charles F. MMPI profiles of a college faculty group. *Proc. Iowa Acad. Sci.*, 1956, 53, 605-609.—MMPI's taken anonymously by about 90% of the male and 70% of the female members of a college faculty revealed marked deviation from the norms. Male and female education majors showed profiles very similar to faculty personnel. Means of male faculty were significantly different from the norm on four of the scales and on three of the scales for the females. Breakdown of the males by division within the college showed some marked differences much in line with expectations.—A. Van Krevelen.

4636. Condell, J. F. Use of the Minnesota Teacher Attitude Inventory (MTAI). *Psychol. Rep.*, 1957, 3, 411-412.—A survey of studies using the Minnesota Teacher Attitude Inventory indicates that the present norms may have only limited validity. It is suggested that scoring should vary with local educational philosophy, and local norms should be developed on the basis of these local scoring systems.—C. H. Ammons.

4637. Dodge, Galen W. & Clifton, Donald O. Teacher-pupil rapport and student teacher characteristics. *J. educ. Psychol.*, 1956, 47, 364-371.—The problem was to determine degree that teacher-pupil rapport relates to certain other characteristics of teachers. Subjects were 112 student teachers at the University of Nebraska. A teacher-pupil rapport (TPR) score was found by having each pupil choose 3 teachers he liked best, learned most from, and obtained help from easiest. When IQ scores, supervisors' ratings, and student teaching grades were each correlated with TPR score, results were positive but low. Peer ratings of social characteristics and professors' estimates of teaching ability correlated as high as 0.5 and 0.6. Using peer ratings and cumulative grade averages a formula was computed for predicting the TPR score.—S. M. Schoonover.

4638. Dosajh, N. L. An investigation into adjustment problems of student-teachers. *Educ. & Psychol. Delhi*, 1956, 3(2), 26-30.—The adjustment of 193 students was investigated using the Sentence Completion Test. Findings discussed were the students' main areas of tension, their fantasies, ambitions, worries, and fears.—H. Angelino.

4639. Fishman, Joshua A. The MTAI in an American minority-group school setting: I. Differences between test characteristics for norm and non-norm populations. *J. educ. Psychol.*, 1957, 48, 41-51.—Certain MTAI test characteristics in a sample drawn from teacher population of various ideological-structural types of American Jewish schools in Greater New York City are investigated. Among findings are: (1) a highly negative relationship between age and mean MTAI scores, (2) a negative relationship between mean MTAI scores and (a) male sex (b) foreign birthplace, (3) a positive relationship between extent of general secular education and mean MTAI scores, and (4) a lower mean MTAI for teachers of "the Arts" than for any other

group of teachers (however, it is not significantly different than mean scores of most teachers of academic subjects). 15 references.—S. M. Schoonover.

4640. Hines, Vynce A. F Scale, GAMIN, and public school principal behavior. *J. educ. Psychol.*, 1956, 47, 321-328.—Subjects were 32 male and 26 female public school principals. Correlations between 6 personality factors and frequency of authoritarian behavior, democratic behavior, and "most effective" practices were obtained. The only variable investigated which appeared to correlate with frequency of behavior was sex. Women principals significantly were more often democratic, less often autocratic, and more often users of best practices. It was concluded that personality factors measured by the F Scale and the Guilford-Martin GAMIN do not predict democratic nor authoritarian behavior nor use of best practices on the job.—S. M. Schoonover.

4641. Irwin, Irl A., Milauckas, Edmund W., & Levy, Bernard I. A procedure for evaluating instructor technique during critiques of crew performance. *USAF Person. Train. Res. Cent. Res. Rep.*, 1956, No. 56-32. vi, 32 p.—32 B-29 instructor crews were rated on teaching effectiveness on the basis of their critiques of students on 2 training missions. Interobserver agreement was high, but little consistency between occasions. A summary critique evaluation score was significantly related to student reaction, instructor perception of student reaction and instructor ratings of crew effectiveness, but unrelated to student attitude-change over a 2-month period and unrelated to student attitudes at the end of training. The highest relationships were obtained between critique scores and immediate student reaction.—S. B. Sells.

4642. Jones, Margaret Lois. Analysis of certain aspects of teaching ability. *J. exp. Educ.*, 1956, 25, 153-180.—A sample of 46 women teachers were divided into a good group and an average group on the basis of a composite of the following three criterion measures: (1) practice teaching grade, (2) Placement Bureau rating, and (3) Principal's rating (M-blank). 20 additional measures in the areas of pre-service achievement, temperament, and personality were obtained for each subject. From analysis of variance, differences between the two groups were found on the variables: (1) professional grade point average, (2) major teaching field grade point average, (3) flexibility in numerical abilities, (4) disposition rigidity (alphabets test), and (5) General Activity (Guilford-Zimmerman). A canonical correlation of .73 was found between a weighted composite of the three criterion measures and a weighted combination of seven of the other measures of pre-service achievement, temperament, and personality. 62 references.—E. F. Gardner.

4643. Knox, William B. A study of the relationships of certain environmental factors to teaching success. *J. exp. Educ.*, 1956, 25, 95-151.—The following measures were obtained for each of 45 subjects: A Teacher Situation Inventory and 4 measures of teacher efficiency based on ratings from: (1) interview with principal; (2) principal (M-blank); (3) the State Department of Education; and (4) peers. The Teacher Situation Inventory consisted of 317 items rated on a five point satisfaction scale pertaining to the following nine categories: (1) com-

munity; (2) people of the community; (3) school plant; (4) school administration; (5) school organization; (6) instructional materials; (7) faculty, (8) students; and (9) particular position. The Inventory responses of the fifteen most satisfied and fifteen least satisfied subjects are examined in some detail. Positive correlations are found between teacher efficiency and some aspects of the environmental situation as measured by the Inventory. 27 references.—*E. F. Gardner.*

4644. Meyer, William J., & Thompson, George G. Sex differences in the distribution of teacher approval and disapproval among sixth-grade children. *J. educ. Psychol.*, 1956, 47, 385-396.—By means of 30 hours of direct observation of teacher-pupil interactions in each of 3 classrooms, it was found that boys received a statistically significant larger number of disapproval contacts than girls. A modified "guess who?" technique was used to discover if children were aware of sex differences in their teachers' approval and disapproval evaluations. Both boys and girls nominated more boys than girls for disapproval items; this difference was statistically reliable. Findings of this study were interpreted as confirming the notion of a sex difference in attitude toward aggressive behavior. It was concluded that teachers attempt to "socialize" boys by dominative counter-aggressive behavior. Consequences of the above are discussed. 30 references.—*S. M. Schoonover.*

4645. Ogawa, Kazuo. Gakkyū no shakai kōzō ni taisuru kyōshi no taido ni kansuru kenkyū: I. (A study of teachers' attitudes toward the social structure of classroom: I.) *Jap. J. educ. Psychol.*, 1956, 3, 228-235.—The accuracy of understanding class room structure by teachers was studied. Teachers of an elementary school enumerated names of popular, isolated and rejected children in their class. The real class structure was obtained by sociometric survey given to children. A 65.5% coincidence between teacher and pupil was found on popular children, while the agreement on rejected children was 39.2%, on isolated only 2.9%. English summary, p. 247.—*S. Ohwaki.*

4646. Resnick, Joseph. The administrator and teacher adjustment. *Educ. Adm. Superv.*, 1957, 43, 44-48.—The administrator is usually considered responsible for the adequate functioning and improvement of a school program. The author analyzes various psychological aspects of administration, which, if provided for sufficiently, can serve to provide a more efficient operating system. After presenting in detail his ten-point program, the author concludes that the result will be increased desirable functioning in the classroom as well as more favorable relationship between faculty members and administrators.—*S. M. Amatora.*

4647. Ryans, David G. Theory development and the study of teacher behavior. *J. educ. Psychol.*, 1956, 47, 462-475.—The role of theory and some characteristics of theories are discussed. Teacher behavior is defined and it is implied that teacher behavior is social behavior is not inherently good or bad, but is a function of the conditions under which it occurs. It is characterized by some uniformity, it does not have an infinite number of independent qualities, and it can be predicted only with

varying degrees of probability. 15 references.—*S. M. Schoonover.*

4648. Stewart, Charles E. A study of teacher perceptions of selected school developments and their implications for the leadership role of the principle in the Grant School, Ferndale, Michigan. *Dissertation Abstr.*, 1957, 17, 1503-1504.—Abstract.

4649. VanNewkirk, William Christian. Comparison of teacher education students who indicated differences in acceptancy of teaching as a vocational objective. *Dissertation Abstr.*, 1957, 17, 1513-1514.—Abstract.

(See also Abstracts 4610, 4361)

PERSONNEL PSYCHOLOGY

4650. Bose, S. K. Psychological aspects of plant personnel. *Educ. & Psychol.*, Delhi, 1956, 3(3), 8-17.—The role of machine efficiency in productivity is limited by the human factor. Man, in addition to his training and experience, has to be motivated to achieve maximum productivity. Thus psychological factors in the work-a-day world must be considered. Work situations are likewise social situations. Work is also a social act. Thus the worker cannot be considered apart from the total work environment. Research in human relations in industry is continuously expanding and must, in order to obtain the optimum knowledge of the many dimensions of human motivation.—*H. Angelino.*

4651. Buck, Leslie. Incentive payments in relation to the size and stability of working groups. *Bull. Brit. psychol. Soc.*, 1957, 32, 52-53.—Abstract.

4652. Collins, Ralph T. The man in the gray flannel suit—as the psychiatrist sees him. *Amer. Mgmt. Ass. Person. Ser.*, 1956, No. 167, 47-55.—When an executive fails on the job, it is usually because he has not learned how to manage people and/or himself. The consequences, physical and psychological, of inability to manage self, people, things, or situations are described. Relief and assistance could be given to the executive if opportunity were provided for reassessment of his weaknesses, values, habits, strengths, and goals, perhaps by means of counseling by members of top management. The roles of wife, physician, spiritual advisor, and peers in contributing to the well-being of executives are discussed.—*D. G. Livingston.*

4653. Hall, Robert L. Predicting bomber crew performance from the aircraft commander's role. *USAF Person. Train. Res. Cent. Res. Rep.*, 1956, No. 56-28. v, 16 p.—Predictive relationships were studied between the interpersonal role of B-29 aircraft commanders during training and the effectiveness of the crew's rated combat performance during the Korean War, 6 to 8 months later. Role measures termed nurturance (paternalism) and intimacy (in interpersonal relations) predicted performance ratings beyond chance expectation. They were also significantly related to crew attitude scores on motivation and morale scales. A role factor, militariness, was unrelated to criteria.—*S. B. Sells.*

4654. Kelly, Robert Donald. The development of a personnel rating technique through the analy-

sis of "work performance incidents." *Dissertation Abstr.*, 1957, 17, 2057.—Abstract.

4655. Levi, M., & Larue, E. Age, speed and accuracy, intelligence level, and several other aptitudes as related to job success of materials dispatcher employees. *Percept. Mot. Skills*, 1957, 7, 213.—191 career status McClellan AFB Aircraft Materials Dispatchers were divided at random into two groups for validation and cross validation purposes. On the basis of job analysis, various tests were administered to all Ss under standardized conditions. It was concluded that the job of Aircraft Materials Dispatcher appears to require a multitude of aptitudes.—C. H. Ammons.

4656. Morlan, Vi. Job analysis—what and why. *Amer. J. Nurs.*, 1956, 56, 1285-1287.—The author analyzes a number of variables one must consider in attempting job analysis, including job adjustments, training personnel, and maintaining efficiency. Discussion centers about methods of analysis, spotting weaknesses, the analysis procedure, job descriptions, and benefits of analysis. Bibliography.—S. M. Amatora.

4657. Norris, Raymond C. Development of a set of dimensions for description of Air Force ground crew jobs. *Dissertation Abstr.*, 1957, 17, 2059-2060.—Abstract.

4658. Paterson, Donald G., & England, George W. Relationship of measured interests to career data of officers in personnel and comptroller positions. *USAF Person. Train. Res. Cent. Res. Rep.*, 1956, No. 56-44, vi, 41 p.—The vocational interests of Air Force officers in the personnel and comptroller areas were measured on the Strong VIB and compared with responses given on a personal history blank. Results for 243 officers in the comptroller field indicated that VIB patterns were related to vocational adjustment; but those for 1,155 personnel officers were less clear-cut. 59 references.—S. B. Sells.

4659. Wrigley, Charles; Cherry, Charles N., Lee, Marilyn C., & McQuitty, Louis L. Use of the square-root method to identify factors in the job performance of aircraft mechanics. *Psychol. Monogr.*, 1957, 71(1), (Whole No. 430). 28 p.—The authors report on a square-root factor analysis of an inventory made of items systematically drawn from a large number of rating scales and questionnaires used in measuring job proficiency. In its present form the inventory was specifically designed to measure the job proficiency of aircraft mechanics. Supervisors were required to make over-all ratings of the mechanics and the inventory items were correlated with these ratings. Ten factors were isolated and named as a result of the analysis. These include: (a) general job efficiency, (b) social maladjustment, (c) executive ability, (d) leadership, (e) personal charm, (f) resourcefulness, (g) willingness and adaptability, (h) orderliness, (i) ability to motivate others, and (j) mechanical proficiency. Comparison between the earlier reported Descriptive Scale and the Factorial Inventory with the Descriptive Inventory indicate that "a shortened scale may be expected to be a better measuring instrument if based on all three inventories than if developed from any single one."—M. A. Seidenfeld.

SELECTION & PLACEMENT

4660. Borg, W. R. Comparison of officers from different sources of commission. *Psychol. Rep.*, 1957, 3, 313-315.—Officers graduating from Squadron Officer's Course Class 52-E were grouped in terms of source of commission and compared on the basis of intelligence, instructor evaluations, and peer ratings of officer qualities. Results indicate that: (a) West Point and Annapolis graduates are superior due to better selection and more extensive training; (b) except for the academy graduates, officers from one source of commission are not generally superior to those from other sources after a year's experience in the field; (c) correlations between military rank and effectiveness criteria indicate low positive relationships; (d) these officers are equal or superior to college freshmen in general intelligence.—C. H. Ammons.

4661. Brodney, Francis Emile. The construction and validation of the U. S. Naval School, officer candidate, self-description blank. *Dissertation Abstr.*, 1957, 17, 1606.—Abstract.

4662. Brown, Robert Lee. The development and validation of a mechanical performance test. *Dissertation Abstr.*, 1957, 17, 1583-1584.—Abstract.

4663. Deutsch, Stanley. Development of the Purdue Oral Classification Test in Spanish. *Dissertation Abstr.*, 1957, 17, 1584.—Abstract.

4664. Dooher, M. Joseph, & Marting, Elizabeth. (Eds.) Selection of management personnel. Vol. I & II. New York: American Management Association, 1957. 542 p.; 364 p. \$15.00.—44 authors are represented in a review of management selection techniques, in 4 parts: selection of supervisors, selection of executives, practical aspects of selection, company practices. Major topics are: the supervisor and his job (4 chapters), supervisory selection program (3 chapters), executive selection (4 chapters), defining the job (5 chapters), assuring a candidate pool (4 chapters), using tools and techniques (8 chapters), supervisory candidate programs (5 company reports), first-line supervisory selection (7 companies), selecting managers (7 companies). Supplementary reading list.—P. Ash.

4665. Dvorak, Beatrice J. The General Aptitude Test Battery. *Person. Guid. J.*, 1956, 35, 145-152.—This is the third of a series of articles on multifactor tests. Administration, reliability, validity, standardization, and use of the test battery are discussed. 100 references.—G. S. Speer.

4666. Faries, Miriam. A therapeutic approach to test interpretation. *Person. Guid. J.*, 1957, 35, 523-526.—Therapeutic procedure requires that test results must be handled as personal data when the results are discussed with the individual concerned. The counselor must help the individual to investigate test implications and integrate these into the total personality.—G. S. Speer.

4667. Findlay, Donald C., Roach, Eugene G., & Cogan, Eugene A. Identification of the important skills in daylight land navigation. *Geo. Washington Univ. HummRRO Tech. Rep.*, 1957, No. 40. vi, 25 p.—Research confirmed the hypothesis that location skills, in addition to compass skills, are essential to land navigation. Training stress on daylight location of oneself on a map is urged. Short tests re-

sembling one employed in the study should be developed. Soldiers' competence should be tested before assignment to daylight land navigation.—R. Tyson.

4668. Flanagan, John C. **The Flanagan Aptitude Classification Tests.** *Personn. Guid. J.*, 1957, 35, 495-507.—This is the eighth in a series of articles on multi-factor tests.—G. S. Speer.

4669. Fokkema, S. D. **Over de verschillen tussen het Amerikaanse en het Europese psychologisch denken, speciaal in verband met vlieger-selectie.** (On the differences between American and European psychological thinking, especially in connection with the selection of air pilots.) *Ned. Tijdschr. Psychol.*, 1957, 12, 205-214.—A discussion of the differences between Europe and the United States in the type of psychological method and theory, and of the effect of these general differences on the selection procedure in aviation psychology in particular.—R. H. Houwink.

4670. Gregory, Estella H. **Evaluation of selection procedures for women naval officers.** *USN Bur. Nav. Person. tech. Bull.*, 1956, No. 56-11. vii, 11 p.—To evaluate current assessment procedures for selecting women reserve officers and to identify the most effective combination of selection measures for predicting success at Indoctrination Unit (W), the following variables were intercorrelated (N=201): Selection measures, Officer Classification Battery scores, other predictors, criteria of school performance and job performance. Three selection measures and an interview rating gave a multiple R of .58 with indoctrination school performance. The only indoctrination school grade related to ratings on officer fitness reports was the Military Aptitude grade; no predictor variables were related to the reports.—H. P. Kelley.

4671. Housholder, Monte Ford. **The development of empirical indices of validity and reliability of the Purdue Non-Language Adaptability Test.** *Dissertation Abstr.*, 1957, 17, 2056-2057.—Abstract.

4672. Kennedy, James Edward. **Validities of a personal history form for automobile salesmen in general compared with subvarieties of automobile salesmen.** *Dissertation Abstr.*, 1957, 17, 1585-1586.—Abstract.

4673. Mayo, G. D., & Thomas, D. S. **Reality testing in a complex prediction situation.** *Psychol. Rep.*, 1957, 3, 288.—Psychologists frequently attempt to predict success and failure. Less often they study systematically how well their predictions work out in complex training and on-the-job situations. The present note summarizes such a study.—C. H. Ammons.

4674. Morrison, Alexander W., & Dubno, Peter. **Will packaged tests find your man?** *Fact. Mgmt.*, 1956, 114(6), 111-113.—Companies interested in installing test-selection programs are told how to begin, how to choose a consultant, what to expect the consultant to do, where to use tests besides for selection, and what testing costs.—P. Ash.

4675. Odiorne, George S. **Five manager development problems.** *Personnel J.*, 1957, 36, 7-9; 11.—The personnel man who attempts to introduce a management development program must first define the role of the director of management development

in such a way as to obtain the cooperation of line management. To keep good employees they must be given an opportunity for inter-departmental or divisional transfers, but many line managers resist losing their good men. Psychological appraisals should be used wisely, neither depending upon them blindly nor rejecting them completely. Management development should be fitted to the company; it cannot be obtained ready made. One of the big problems is getting the program started after it has been verbally approved. The company president or an outside consultant may be helpful in overcoming the inertia.—M. B. Mitchell.

4676. Talcott, Douglas Ross. **Conversational behaviors and their effects in the interview.** *Dissertation Abstr.*, 1957, 17, 1588.—Abstract.

4677. Traxler, Ralph N., Jr. **Training needs spotted by attitude surveys.** *Personnel J.*, 1957, 36, 15-17.—Attitude surveys should be followed by individual interviews with part of the participants. In some cases, training programs may not be indicated. In some cases, the type of training program needed may not be revealed by the attitude survey alone. Favorable attitudes toward top management, for example, may be merely masking poor immediate supervision.—M. B. Mitchell.

4678. Vinacke, W. E. **The assessment of officer-like qualities in naval air cadets.** *USN Sch. Aviat. Med. Res. Rep.*, 1956, Proj. No. NM 001 109 101, Rep. No. 6. iii, 30, A-1 p.—This report presents a "test case" for the validity of the officer-like qualities rating, together with analyses of the validity of other measures of "nontechnical" aspects of training. These include peer nominations, cadet officership, and records of delinquency and demerits. Certain internal properties of the OLQ rating are examined, especially the incidence of substandard checks. The criterion of validity was judgment of acceptability as an officer made by senior officers in the fleet. In general, evidence reveals that satisfactory men differ from unsatisfactory men throughout training. Available measures possess sufficient validity for prediction purposes. It is suggested that officer likeness involves traits of military behavior, leadership, acceptability as a person, and devotion to duty. Proposals to improve the measurement of officer likeness are considered.

LABOR-MANAGEMENT RELATIONS

4679. Argyris, Chris. **The individual and organizational structure.** *Amer. Mgmt. Ass., Person. Ser.*, 1956, No. 168, 3-11.—The "latest" popular management principles in improving human relations are only partially true and partly contradictory. There is furthermore a basic incongruity between the healthy kind of people growing in this country—independent, active, and roundly trained—and the kind of jobs we can offer them. The way in which industry is organized tends to create dependence, apathy, disinterest, and a sense of subordination. While the author sees no better way of organizing people for industrial effort, he suggests that it may be possible to create a situation in which people are loyal and committed to the company's interest by providing a situation in which they are active, and feel a genuine sense of participation in decision-making.—P. Ash.

4680. Coates, Charles H., & Pellegrin, Roland J. Executives and supervisors: Contrasting self-conceptions and conceptions of each other. *Amer. sociol. Rev.*, 1957, 22, 217-220.—An application of Charles Cooley's concept of the "looking-glass self" and George Herman Mead's "taking the role of the generalized other" to a study of what makes for a good executive, and a comparison of executive levels, i.e., top-level executive and somewhat lower supervisor.—G. H. Frank.

4681. Collins, Alan Keith. Developing leadership in a small plant: A critical account of an experimental management training program. *Dissertation Abstr.*, 1957, 17, 2056.—Abstract.

4682. Dansereau, Harry Kirk. Orientations toward unionism: An attitudinal study of a local union. *Dissertation Abstr.*, 1957, 17, 1619.—Abstract.

4683. Dawis, René V. The measurement of supervisory attitudes: An exploratory study. *Dissertation Abstr.*, 1957, 17, 1806.—Abstract.

4684. Evans, Chester E. Getting the facts about supervisors and their jobs. *Amer. Mgmt. Ass., Person. Ser.*, 1956, No. 167, 14-28.—Customary approaches to describing the supervisor's job (e.g., attitude surveys, job descriptions) emphasize what he should be doing. Knowledge of what he is doing, however, is seldom available despite its critical importance for selection, appraisal and development. Knowledge of what a supervisor does is gained best from observational studies, of which three are described, compared and evaluated. The observational study, even simply carried out, will provide valuable and stimulating data for further supervisory study.—D. G. Livingston.

4685. Hale, Jess E., Jr. Maintaining the identity of the individual. *Amer. Mgmt. Ass., Person. Ser.*, 1956, No. 168, 52-59.—The president of a tool company describes how the company, faced with high turnover rooted in poor morale, and employee feelings of being lost and ignored, instituted a communications program, committee system, and employee opinion surveys that paid off in company growth, increased productivity, and increased sales.—P. Ash.

4686. Maloney, John Clement. The role of the foreman in modern industry: Some considerations of management identification of foremen. *Dissertation Abstr.*, 1957, 17, 2058.—Abstract.

4687. Menninger Foundation. Toward understanding men: The practical application of psychiatric knowledge to management functions. (2nd ed.) Topeka: Author, 1957. viii, 229 p. \$3.50.—This transcript of the proceedings of 2 one-week seminars for business executives deals with the practical application of psychiatric knowledge to management functions. Motivation, communication and supervision are first developed theoretically and then through case and problem discussions.—P. Ash.

4688. Nanjundiah, H. N. The human aspects of productivity in industry. *Industr. Relat., Calcutta*, 1956, 8, 113-117.—Management should not aim for higher production directly; rather, it is far more desirable to adopt meaningful and humane personnel standards and practices. When this is done,

workers will be happier and productivity will increase automatically.—H. Silverman.

4689. Segerstedt, Torgny T., & Lundquist, Agne. Man in industrialized society. Stockholm, Sweden: Studieförbundet Näringsliv och Samhälle, 1956. 23 p.—This is a summary in English of the Segerstedt-Lundquist study. The purpose of this survey sponsored by The Industrial Council for Social and Economic Studies was to study the adjustment of individuals and social groups to the industrialized society. The authors explain their survey and analysis methods and then review some findings relating to the life within the plant (morale and job satisfaction), as well as to leisure time and community life, where they have had set up some hypotheses as to the importance of certain time, background and present factors for adjustment, and tested them in their research.—M. Chojnowski.

4690. Tannenbaum, Arnold S., & Allport, Floyd H. Personality structure and group structure: An interpretative study of their relationship through an event-structure hypothesis. *J. abnorm. soc. Psychol.*, 1956, 53, 272-280.—"The attitude of favor or disfavor, developed by workers in a large business organization to 2 experimental programs with contrasting patterns of allocating authority appears to be a function, as was predicted, of the interaction between the personality structure of the individual and the structure of the work-program in which he is operating. Those individuals who . . . are 'suited' to the program they are in, tend to feel a greater satisfaction with it and a greater degree of liking for it than do those whose trend structures are 'unsuited' to their program."—A. S. Tamkin.

INDUSTRIAL & OTHER APPLICATIONS

4691. Ferguson, Leonard W. Industrial psychology. *Annu. Rev. Psychol.*, 1958, 9, 243-266.—This review to April 1957 includes a 241-item bibliography.—A. J. Sprow.

4692. Teeple, J. B. Work of carrying loads. *Percept. Mot. Skills*, 1957, 7, 60.—This note summarizes a comprehensive review of the literature on transportation of loads by human Ss. Principles drawn from the studies are given.—C. H. Ammons.

INDUSTRY

4693. Bennett, William F. A human factors analysis of the XMF-10 trailer. *USAF Spec. Weapons Cent. Tech. Rep.*, 1956, No. 56-40. vii, 25 p.—"Thirteen problem situations were identified in a Human Factors study of the XMF-10 Bomb Trailer. This report summarizes the recommended solutions to the thirteen problems and describes the characteristics and functions of the trailer.

"The Appendix to this report is comprised of Problem Memoranda, each of which discusses a specific problem situation, and the recommended human factors solution."—E. G. Aiken.

4694. Bennett, William F., Kirchner, Wayne K., & Brower, Joe D. A human factors analysis of the MF-8 trailer. *USAF Spec. Weapons Cent. Tech. Rep.*, 1956, No. 56-28. iv, 44 p.—"The MF-8 Bomb Lift Trailer is designed to lift, transport, and load stores up to 25,000 pounds into various aircraft.

Successful operation of this multi-purpose trailer requires considerable operator skill in manipulating controls and in interpreting instrument panel readings. Human factors recommendations contained in this report are directed primarily toward equipment design features which will permit optimum operator use of the various instruments and controls.—E. G. Aiken.

4695. Bradley, James V. Effect of gloves on control operation time. *USAF WADC Tech. Rep.*, 1956, No. 56-532. iv, 11 p.—5 types of control mechanisms were manipulated by Ss with and without gloves. Operation time was the dependent variable. Conclusions indicate that double gloves, i.e., leather glove over wool glove was superior to wool glove alone and never inferior to the bare hand.—R. T. Cave.

4696. Brown, F. R., & Siegel, A. I. Caution and warning light indicators for naval aircraft. I. A review of the present state of the art. Wayne, Penn.: Applied Psychological Services, 1956. viii, 72 p.—As the first study in a series pertaining to the presentation of warning and cautionary information to pilots, the growth in the number of light indicators and changes in the proportionate use of lights for indicating various malfunctions is noted. The cautionary and warning indicators found in 18 current naval aircraft were examined to determine their number, location, color, legend and/or labeling and test and dim features. Recent and pertinent literature related to visual warning indicators were reviewed. 24 references.—P. Federman.

4697. Chapanis, A. L'adaptation de la machine a l'homme: L'étude des relations homme-machine. (Adapting the machine to the man: The study of man-machine relationships.) *Rev. Psychol. appl.*, 1956, 6, 213-234.—The field of human engineering is defined and the reasons why it is flourishing in the United States are illustrated by studies in which the practical application of typical findings has been made. The potentialities have only begun to be explored.—W. W. Wattenberg.

4698. Davis, R. C. Electromyographic factors in aircraft control: Muscular activity during steady noise and its relation to instructed responses evoked by visual signals. *USAF Sch. Aviat. Med. Rep.*, 1957, No. 55-126. 9 p.—Subjects were required to move lever with a wrist motion to one side or the other (in response to specified visual signals), then immediately return it to center position. Measurements of muscle action potentials were made for extensor and flexor regions of both arms on 32 subjects under both noise (90 db) and quiet conditions. Noise produced an increase in tension level in all locations and also influenced response time.

4699. Davis, R. C. Electromyographic factors in aircraft control: Muscular tension when task requirements are changed. *USAF Sch. Aviat. Med. Rep.*, 1957, No. 55-131. 11 p.—The hypothesis was advanced that the amount and sign of transfer in the transfer of training paradigm are ultimately determined by the relations among the system activities involved in all of the responses occurring in the two situations. An experimental test of this proposal was made, using the SAM Discrimination Reaction Test as the source of both tasks. The significance of half the signals was merely reversed to obtain the

reversed task: Recordings of muscle action potentials showed a progressive decline in tension as the task was mastered and a rise in tension when the second task was begun. 17 references.

4700. Ellis, Douglas S. Gun-camera records as measures of pedestal sight gunnery proficiency. *USAF Person. Train. Res. Cent. Res. Rep.*, 1956, No. 56-30. viii, 25 p.—Proficiency measures derived from gun-camera records obtained during aerial flexible gunnery training missions were found to have zero between-mission reliability. Procedures used in scoring were not found to be a major factor contributing to the obtained low reliability.—S. B. Sells.

4701. Fitts, Paul M. Engineering psychology. *Annu. Rev. Psychol.*, 1958, 9, 267-294.—A review of the literature published between January 1956 and May 1957. 149-item bibliography.—A. J. Sprow.

4702. Forbes, T. W., & Katz, M. S. Summary of human engineering research data and principles related to highway and traffic engineering problems. Pittsburgh: American Institute for Research, 1957. 53, a 47, b 2, c 9 p.—"This report presents in brief fashion certain essential data and principles from various fields of human factor research to make it useful to highway design and traffic engineers." The chapter headings are: The Highway Engineer and the Driver's Task, Principles Relating Driver Response Time to Task Characteristics, and Principles of Visibility Related to Highway Problems. 83 references.—E. G. Aiken.

4703. Heath, Earl Davis. The relationships between driving records, selected personality characteristics and biographical data of traffic offenders and non-offenders: A study of selected personality characteristics and selected biographical data of motor vehicle traffic offenders and non-offenders and the relating of differences obtained to records of their driving performance. *Dissertation Abstr.*, 1957, 17, 1949-1950.—Abstract.

4704. Henneman, Richard H. Human engineering: Applied experimental psychology. *Virginia J. Sci.*, 1957, 8, 103-112.—In a brief survey of the field of "engineering psychology," the author suggests a definition, sketches its short history, discusses alternative descriptive titles, points to problems typically attempted, outlines contact sectors with other areas of psychology and science in general, and lists the types of agency currently undertaking research.—O. W. Lacy.

4705. Kirchner, Wayne K. An evaluation of the calibration system for USAF special weapons standards and test equipment. *USAF Spec. Weapons Cent. Tech. Rep.*, 1956, No. 56-22. vii, 63 p.—"Basic problems of the calibration system are presented together with recommendations for their solution. Problems of equipment handling, communications, derivation of equipment correction factors, technical orders, and equipment design are considered. Over 40 recommendations are listed for the improvement of calibration report forms and the calibration reporting system.

"Results of an experiment on report form construction also are shown. Variables considered in this experiment are the use of mathematical checks in computation, tabular aids, and work space. Tabular aids are shown to reduce errors in computation

while mathematical checks and the use of work space do not."—E. G. Aiken.

4706. Kobrick, John L. **Quartermaster human engineering handbook series. II. Dimensions of the lower limit of gloved hand size.** *USA Om. Res. Developm. Cent. Environ. Protect. Res. Div. Tech. Rep.*, 1957, EP-43. xiv, 185 p.—This report presents human engineering information on the hand dimensions of the soldier wearing various ensembles of Quartermaster protective handwear. It should prove useful to engineers and designers as a handbook for establishing size and space allowances in the design and sizing of hand-operated equipment. The criterion used is the point below which the smallest five percent of hand sizes fall; therefore, the data are concerned with the lower limit of hand size. The information is presented in pictorial form with index scales, so that dimensions can be measured on the pictures and referred to the index scale to establish actual size.

4707. Kruithof, A. A., & Ouweltjes, J. L. **Colour and colour rendering of tubular fluorescent lamps.** *Philips tech. Rev.*, 1957, 18, 249-260.—The mixture of phosphors in fluorescent lamps to give improved color rendition is predicted in terms of the geometry of color mixture, and a test is made of the nearness to "black-body" color rendition produced by a variation in phosphor mixtures. Optimal phosphor mixtures are given for practical fluorescent spectral approximations to 2900 K, 4000 K, and 6500 K black-body sources. Optimal phosphor mixtures are determined as a predictable compromise between color rendition and luminous efficiency.—R. W. Burnham.

4708. Lesiw, Walter & Goldstein, Myron. **Relationships between size-matching test and pedestal sight gunnery performance.** *USAF Person. Train. Res. Cent. Res. Rep.*, 1956, No. 56-29. vi, 16 p.—This study is of interest in relation to problems of economical simulation of operator tasks involving complex equipment. A size-matching test to measure accuracy of detecting adjustment of the target-framing circle, as in the pedestal sight, was investigated in relation to pedestal sight gunnery performance. Median correlations between the speeded size matching test (which was superior to a power version) were framing .46, azimuth .32, and elevation .18. These correlations dropped to near zero in a follow-up study, but shrinkage was attributed to apparatus difficulties.—S. B. Sells.

4709. Loeb, M. **The influence of intense noise on performance of a precise fatiguing task.** *U.S.A. med. Res. Lab. Rep.*, 1957, No. 268. ii, 10 p.—10 subjects were required to perform a fatiguing task in accordance with several criteria before, during, and after three experimental conditions which involved 115 db continuous broad band noise, 115 db randomly interrupted noise and 50 db ambient noise (control exposure). A hydraulic rowing machine, converted into an ergograph, was amenable to specific task measurements. No changes attributable to noise were observed. Some temporal changes were noted. The possible significance to these changes was discussed.—R. V. Hamilton.

4710. McQuire, James C., & Kraft, Conrad L. **Reaction of ten radar air traffic controllers to operational use of the telex twin-microphone, boom-type, split headset.** *USAF WADC Tech. Note*,

1956, No. 56-541. iii, 10 p.—The Telex Company headset was used by 10 air comptrollers for a 4-hour period. The Ss were then asked to complete a questionnaire designed to obtain reactions to the headset compared with the current operational headset. These summarized responses indicate a very favorable reaction to the lightweight Telex headset.—R. T. Cave.

4711. Miller, Gilbert Edwin. **Development of a methodology for establishing visual requirements.** *Dissertation Abstr.*, 1957, 17, 2059.—Abstract.

4712. Patton, Rollin M. **Electromyographic factors in aircraft control: The effect of induced tension upon muscular activity during simple voluntary movement.** *USAF Sch. Aviat. Med. Rep.*, 1957, No. 55-133. 20 p.—Muscle action potentials were taken from the extensor digitorum and flexor digitorum of the right forearm. The subject was required to make a flexion movement with his hand to one tone, an extension movement to a second tone. The signals for these movements were given at varying times after flexion movements of the left wrist. The data were examined for relationships between muscle tension at various locations and the reaction time of movements in which muscles at these locations are involved. 25 references.

4713. Pilgrim, Francis, J. **The components of food acceptance and their measurement.** *Amer. J. clin. Nutr.*, 1957, 5, 171-175.—Considers prediction of food acceptance, in reference to criteria of acceptance ("consumption with pleasure"), components of food acceptance (physiological, sensory, attitudinal), and methods of their measurement (attitude studies, affective and discriminatory sensory tests, and food consumption).—J. Brožek.

4714. Piret, R. **Psychologie sociale et accidents du travail.** (Social psychology and industrial accidents.) *Cah. Pédag.*, 1957, 16, 60-68.—A study of the influence of the familial, social, and vocational background on the occurrence of industrial accidents. Suggested remedies. 18 references.—R. Piret.

4715. Schipper, Lowell M., & Versace, John. **Predictions of arrival sequences of simulated radar targets as a function of display size, target size, and target sharpness.** *USAF WADC Tech. Rep.*, 1956, No. 56-72. v, 13 p.—3 major radar display variables were examined with regard to the speed and accuracy with which observers could predict the sequence of simulated aircraft arrivals at a reference line. The variables were target size, target sharpness, and overall display size. "It is concluded that the lack of changes in accuracy of judgments with different values of the independent variables was probably a function of the ratio-type of judgment made, i.e., it is assumed that the speed and distance components of the ratio, respectively, were within a range providing equal amounts of error in estimating the ratios."—E. G. Aiken.

4716. Siegel, A. I., Brown, F. R., & Belsterling, C. A. **A preliminary guide to the engineering audit of complex electronic systems design.** Wayne, Penna.: Applied Psychological Services, 1956. v, 65 p.—A series of considerations which should be held in mind when developing complex equipment systems is presented in this, a preliminary guide, making it thus useful as a desk tool. An attempt was made to point out to the engineer certain neces-

sary aspects of planning, analysis, and design which he might otherwise overlook during the stress of the development of a new system.—P. Federman.

4717. Stone, G. Raymond. The effect of the differential selection of target study cues upon aiming point identification test performance. *USAF Person. Train. Res. Cent. Res. Rep.*, 1956, No. 56-40. v, 8 p.—The hypothesis that the quality of observer performance on a simulated bomb run will be a direct function of the differential selection of usable information from target study was tested using a group motion picture test film. Following the test, the group of experienced observers tested were divided into 2 groups according to cues used and one group, which used return cues which are less susceptible to distortion, was significantly superior. Further study with other targets is indicated.—S. B. Sells.

4718. Torrance, E. Paul, & Mason, Raigh. Psychologic and sociologic aspects of survival ration acceptability. *Amer. J. clin. Nutr.*, 1957, 5, 176-179.—3 studies concerned with factors affecting acceptability of pemmican (a meat product recommended for Arctic use) in realistically simulated survival situations, were described. Low acceptance was significantly associated with: (1) incidental factors, such as first-time use, unusual hunger or undue fatigue, and other unfavorable conditions at the time of initial use, eating pemmican only in small quantities; (2) specific attitudes, such as history of past or present food aversions, unfavorable expectations, and perception of unfavorable crew attitude; and (3) such general personality characteristics as weak ego strength and relatively unaggressive adjustment to life in general.—J. Brožek.

4719. Van Cott, Harold P., & Altman, James W. Procedures for including human engineering factors in the development of weapon systems. *USAF WADC Tech. Rep.*, 1956, No. 56-488. vi, 116 p.—Systematic procedures for the human engineering of developmental weapon systems are suggested. A design schedule is outlined. This schedule suggests at what points and in what ways human engineering should be accomplished. Secondly, assessment procedures for human engineering problems are discussed. Finally, human capabilities and limitations are discussed from the point of view of the man as a system component.—R. T. Cave.

4720. Versace, John. The effect of emergencies and communications availability with differing entry rates: A study in human engineering aspects of radar air traffic control. *USAF WADC Tech. Rep.*, 1956, No. 56-70. viii, 72 p.—This report is the 5th in a series using the OSU electronic air traffic control simulator and conducted for the purpose of determining the capacities of human controllers for performing different control functions. Results indicate that system efficiency, measured by such criteria as fuel economy, control time, and safe separations at the GCA gate, decreases significantly as entry rate is increased. However, the presence of 10% emergencies and the lack of face-to-face communication between controllers did not degrade the performance of the system. Implications of this study are discussed in detail. 26 references.—R. T. Cave.

4721. Voas, Robert B. Inventory testing of vocational interests of naval aviation cadets: Final results. *USN Sch. Aviat. Med. Res. Rep.*, 1957,

Proj. No. NM 14 02 11, Sub. 1, Rep. No. 23. ii, 8 p.—The Kuder Preference Records of 605 naval aviation cadets were used to examine measured interest patterns as predictors of success, failure, or voluntary withdrawal. Small but statistically significant validity was demonstrated for the prediction of all types of attrition from Kuder Preference Records. However, when differences in mechanical ability were controlled, this inventory did not show a significant relationship to the pass-fail criterion. Thus, the vocational interests measured by this scale do not appear to have any relationship to success in flight training except as they reflect the presence or absence of the special skills required in flying.

4722. Walker, Charles R. Toward the automatic factory: A case study of men and machines. New Haven: Yale Univ. Press, 1957. xxii, 232 p. \$5.00.—"A three-year battle between thirty men and a machine" is how the author characterizes the impact of the installation of the first continuous seamless pipe mill on the men who were assigned to operate it. The case study of the first three years of the history of the new mill (which started in production in 1949) reports at length from the many interviews with the men, and deals with the effect of technological change on job content, worker-management relations, the union, primary work groups, pay, incentives, promotional opportunities, and job security.—P. Ash.

4723. Wysecki, Günter. Theoretical investigation of colored lenses for snow goggles. *J. opt. Soc. Amer.*, 1956, 46, 1071-1074.—"Safe driving or skiing in the 'arctic whiteout' depends frequently upon the early detection of crevasses, fissures, ditches, or other sudden changes of elevation in the snow field. It has been believed that there might exist a certain colored glass for snow goggles which would provide a better perception of dangerous spots in snow. . . . It is found that compared with an essentially neutral glass none of the colored glasses ordinarily used in snow goggles improves the ability of the eye to detect sudden changes of elevation in a snow field. Even red glasses of extreme purity—which according to the present theory would be expected to give a maximum of improvement, are not significantly more effective than neutral glasses."—F. Ratliff.

(See also Abstracts 3538, 3678, 3861, 4511, 4530)

BUSINESS & COMMERCE

4724. Filipello, F. Organoleptic wine-quality evaluation. I. Standards of quality and scoring vs. rating scales. *Food Tech.*, 1957, 11, 47-51.—To determine a method of assessing wine quality premium wines were diluted with "young" wines to establish a graded series where the differences between samples were barely supra-threshold as determined by the triangular and paired preference methods. These were evaluated by an 8 member panel using a standard wine scoring method, a quality rating scale, and Scheffe's paired comparison method. Various experimental designs were used. Results from Scheffe's method substantiated those of the paired preference threshold determinations. In complete block presentation gave better results with 3 than with 4 samples. There was a tendency to rate each sample in the block as different from any other.—D. R. Peryam.

4725. Filippello, F. **Organoleptic wine-quality evaluation. II. Performance of judges.** *Food Tech.*, 1957, 11, 51-53.—A series of 5 samples prepared by diluting premium with low quality wine was judged by a 4-member panel of wine experts and by a 4-member panel of non-experts using a quality rating scale and a standard wine scoring procedure and employing various experimental designs. Correlations were computed between panel results and the physical quality series. Individual and group correlations were generally significant and high. The expert panel was superior to the non-expert. Performance was better with complete than with incomplete block presentation and, in the latter, was better with the serving of 3 samples than 4. With single sample presentation neither panel gave significant correlation. Significant order effects were found for the scoring, but not for the rating method.—D. R. Peryam.

4726. Goode, Mackarness H. **How good a tool is motivation research.** *Adv. Agency*, 1957, 50(12), 16-20.—Motivation research is after new kinds of facts, but the range of facts is narrow. The majority of its findings fall into only two classes: (1) memories that people attach to the subject being researched, and (2) personal ideas that influence actions. Methods of research most commonly used are based on free association. It should not be used for problems with obvious answers, and not for small problems—but for big ones where new knowledge about people can pay substantial rewards.—D. W. Twedt.

4727. Laird, Donald A., & Laird, Eleanor C. **Practical business psychology.** (2nd ed.) New York: McGraw-Hill, 1956. viii, 472 p. \$6.00.—Designed as a basic text in the application of psy-

chological principles to business, the book (see 26: 1746) provides a non-technical approach to improving both management and employee relationships. The 24 chapters are grouped in 4 parts: (1) Personal efficiency, (2) Human relations and morale, (3) Personality and emotional health, (4) Personal leadership and group cooperation. The authors develop these through subtopics liberally illustrated with "cartoons" and concrete business situations.—M. R. Kovnar.

4728. Naumann, H. D., Rhodes, V. J., Brady, D. E., & Kiehl, E. R. **Discrimination techniques in meat acceptance studies.** *Food Tech.*, 1957, 11, 123-125.—Three types of effort are coordinated in the long range attack on problems of the consumer acceptance of meat: laboratory panels for defining grade homogeneity and studying sensory attributes; small household panels for preliminary pilot test surveys of eating preference; and large (250-500) stratified probability samples of metropolitan households. Product definition, product sampling, and survey methods are described.—D. R. Peryam.


4729. Twedt, Dik Warren. **New three-way measure of ad effectiveness.** *Print. Ink*, 1957, 260 (10), 23.—Trivariate analysis is a method for objective measurement of the desirability, exclusiveness, and believability of advertising themes. The higher the desirability rating for a given theme, the more likely that theme is to be effective. Similarly, the higher the exclusiveness rating, the better—up to a point. Beyond this point, the mass may be approaching a critical ratio of consumer disbelief and rejection.—D. W. Twedt.

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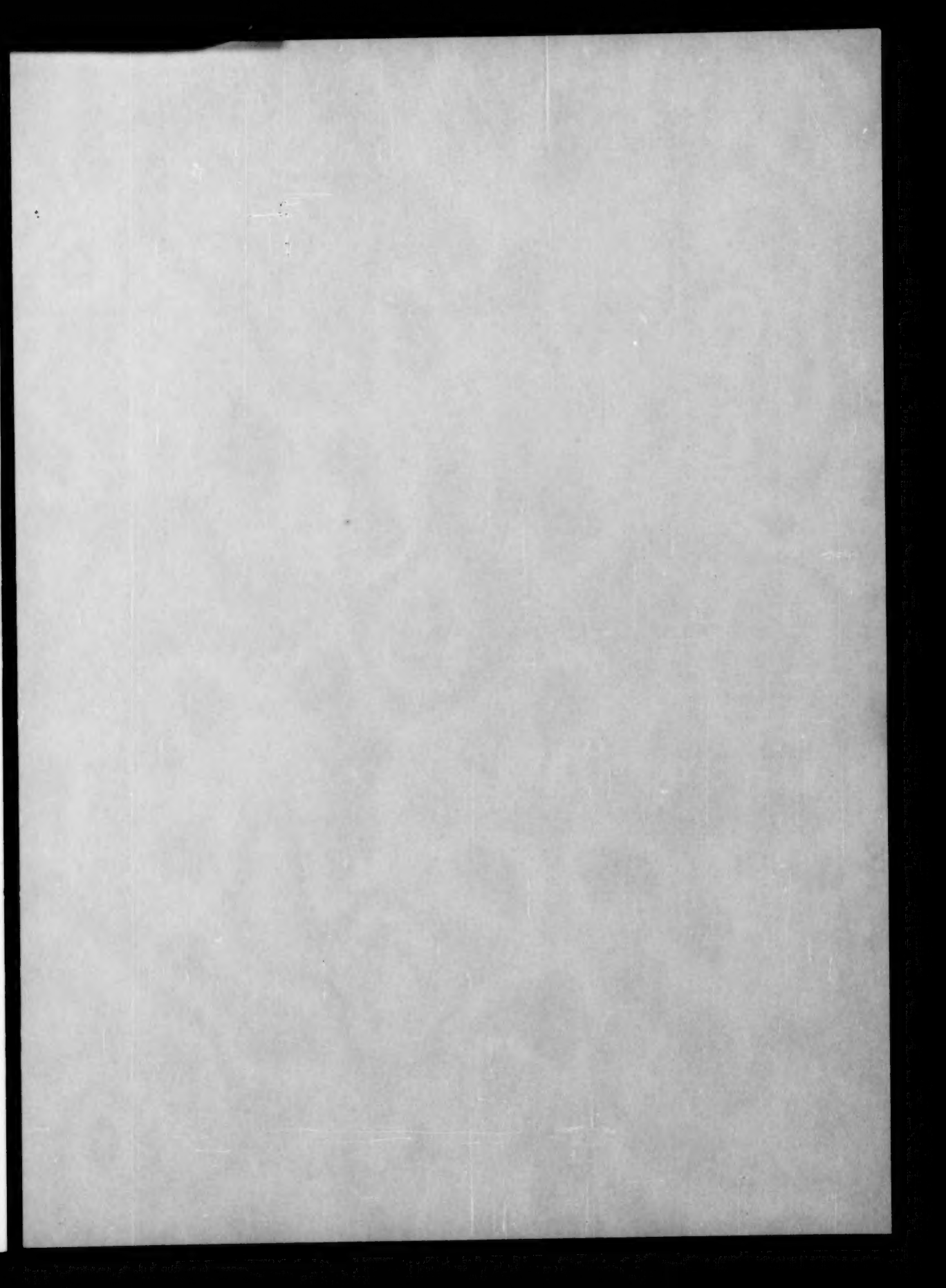
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